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Lexical gaps in Czech as compared with English: their identification and characterization

**Lexikální mezery v češtině ve srovnání s angličtinou: jejich identifikace a
charakteristika**

Diplomová práce

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**I declare that the following diploma thesis is my own work
for which I used only the sources and literature mentioned**

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Contents

Abbreviations

| | |
|--|----|
| 1. Introduction | 5 |
| 2. Theoretical background | 8 |
| 2.1. Semantics | 8 |
| 2.1.1. Meaning | 9 |
| 2.1.2. Lexical fields | 11 |
| 2.2. Lexical gap | 14 |
| 2.2.1. Defining lexical gaps | 14 |
| 2.2.2. Constraints on lexical gaps | 22 |
| 2.3. Approaches to lexical gaps | 23 |
| 2.3.1. Structural approaches (in one language) | 23 |
| 2.3.2. Contrastive approaches (two languages) | 26 |
| 2.4. Dealing with lexical gaps | 28 |
| 3. The aim of the study, its method and data | 35 |
| 4. Research | 39 |
| 4.1. Analysis of possible gaps in lexical fields | 39 |
| Example a: <i>to jump</i> | 39 |
| Example b: <i>the throw</i> | 43 |
| Example c: animal species | 44 |
| Example d: family relationships | 46 |
| Example e: garden tools | 48 |
| 4.2. Comparative search in dictionaries | 50 |
| Example f: letter k entries | 50 |
| Example g: ki – initial entries | 52 |
| Example h: letter l entries | 54 |
| Example i: man entries | 55 |
| Example j: man vs. woman entries | 57 |
| 4.3. Filling the lexical blanks in Czech: neologisms | 59 |
| 4.4. Summary and discussion of the findings | 66 |
| 5. Conclusion | 69 |
| 6. Shrnutí | 71 |
| References | 82 |

Abbreviations

| | |
|------|---|
| CALD | Cambridge Advanced Learner's Dictionary |
| LF | Lexical Field |
| LG | Lexical Gap |
| LL5 | Lingea Lexicon 5 |
| SL | Source language |
| TE | Translation equivalent |
| TGR | Translation group |
| TL | Target language |

1. Introduction

To convey a message is the primary task of communication. The recent development in all areas of life, the increasing desire for exploring other cultures and among others the globalization of all possible processes and practices, has given rise to a growing demand for information. There are all kinds of human activity which require and demand transmission of various types of information. The human race has come to the point where language contact is an everyday reality and where the communication between remote parts of the world and between different cultures is a fact. Not only do we communicate for pleasure but also for business reasons and the importance of the right linguistic encoding has become a great concern to many of us. This proper encoding of any message requires understanding the vocabulary which speakers of individual languages have on hand in the act of communication. It requires an understanding of the meaning carried by individual lexical items in the lexicon and it assumes advanced knowledge of the relations (grammatical and semantic) between lexical items. This is summarized in Cruse (2004: 273): ‘Communication using isolated words is necessarily extremely limited: words need to be used together with other words. But a simple collection of words is not much use either: combinations of words need to be governed by grammatical rules.’

The general assumption among most language users is that every single concept in our world can be labeled by a proper lexical item, i.e. there is a name for all of the physical or abstract entities we live with and situations we experience. It has been suggested by several studies, and we will concentrate on these, that there are usually several conceptual structures in the studied languages which are in fact not lexicalized. This linguistic phenomenon is called a lexical gap, and there is more than one type of lexical gap observable in languages. Recent studies of the occurrence of a lexical gap show various approaches to the subject with various results. The study of lexical gaps can be approached from the point of view of lexical fields, as suggested by Alan Cruse and Adrienne Lehrer among others. In this approach different fields: taxonomies, hierarchies, clusters,

grids, linear structures and matrixes help to organize the lexicon into conceptual structures where the missing structural part is then best observable and studied with relation to the other units in the field. Other approaches, Bentivogli and Pianta for example, favour contrastive lexicological studies where a lexical gap is identified as a missing translational equivalent in a target language to a lexical item in a source language. The study of lexical gaps has received increased attention recently, because of the present-day demand for the translation of all kinds of documents, statutes, provisions, regulations, licences, contracts and others. Therefore a major part of our analysis will focus on the comparison of the Czech and the English lexicons. The study may be used as a future reference for all bilingual users in both languages, as we believe that both writers and translators should pay close attention to the peculiarities of their languages and their highly specific lexicological features. In order to produce an accurate copy of a document, translators should be aware of the fact that there is the possibility of misinterpretation of their words and this can be due to the lack of lexical material which they have at their disposal. We established above that we can call this lack of lexicalized expression a lexical gap.

Our comparative study of lexical gaps, using Czech and English, and the search for them is carried out in order to confirm or deny the effectiveness of the different methods suggested by the researchers. This analysis should provide speakers in the Czech and the English communities with a better understanding of the lexical differences between the Czech and the English language norms. We presume that most of the non-linguistic circumstances are the same in English and Czech writing. The composer of a text must satisfy the same general needs in both languages, i.e. to communicate a message. The translator in both languages must try to interpret these needs as accurately as possible. The question is whether both norms, English and Czech, operate with the same lexical instruments to fulfill their goals. Do both Czech and English text authors have the same means to provide the same result? To locate the possible lexical gaps we will use bilingual dictionaries as well as internet resources such as the Princeton WordNet. In order to understand the

nature behind the lexical meaning of a word and to be able to pin down the most appropriate definition of a word's meaning, we will also summarize the facts about the nature of meaning itself.

2. Theoretical background

2.1. Semantics

Our discussion of lexical gaps may start with the study of semantics. It is a long way from the explanation of a lexical gap, but it is central to understanding the meaning and lexical gaps cannot be studied and specified without a prior elementary knowledge of the meaning of words. The field that studies meaning in all its aspects is called semantics. For the purpose of our study we will discuss general the issues which are central to the study of semantics but we will mainly concentrate on the field of semantics which is closely related to our research and this will be lexical semantics. Semantics draws attention to meaning as a general entity of human life and lexical semantics concentrates on the meaning meaning-related properties of words. The semantic aspect of a linguistic sign (Leech: 1981) was not always the concern of linguists and they rather saw semantics as a subpart of philosophical and anthropological studies. This has changed according to Leech, and a few decades ago semantics became to be viewed as a part of linguistics. Linguists agreed on the necessity of studying meaning as an integrated component within the total theory of how language works. Semantics subsumes various disciplines in order to study all aspects of meaning properly. According to Cruse (2004:10) "the linguistic approach to semantics takes the existence of meaning for granted and accepts it as an intuitively accessible 'natural kind' ". Consequently, linguists leave the 'real' nature of meaning for philosophical studies. Similarly, linguistics deals only partially with the question of how meanings are represented in the mind, and what mechanisms are involved in encoding and decoding messages. Cruse says that the linguistic approach to meaning in language can be assigned three key aspects (2004: 11): 'The first is that native speakers' semantic intuitions are centre-stage, in all their subtlety and nuances: they constitute the main source of primary data. The second is the importance of relating meaning to the manifold surface forms of language. The third is the respect paid not just to language, but to languages. '

Lastly, the many areas which are covered by semantics should not be taken as separate study of meaning but rather as overlapping cross-disciplines which contribute to the mutual goal of defining and understanding meaning.

2.1.1. Meaning

Our study discusses lexical items on the basis of their semantic content. There are many approaches to meaning in linguistics and only some of them can be used for our purpose. To discuss meaning of a word we should be able to distinguish between the most important concepts related to the notion of meaning in general. Cruse (2004: 11) says that ‘The importance of specifying and describing meaning, whether of isolated words or sentences, or of utterances in context is discussed from different angles with different results’. He continues and (2004: 11) questions ‘the possibility of precise description of meanings in general’ and he narrows the search for meaning ‘to finding the best way to approximate meanings as closely as is necessary for current purposes’. Lyons (1977: 4) says that ‘there is a distinction to be drawn between the meaning of a word and the meaning of a (non-idiomatic) phrase or sentence and that the fact that the meaning of a phrase or sentence is a product of the meaning of the words of which it is composed’. Leech (1981: 4) considers ‘only’ seven out of the many types of meaning to be important for the study of a linguistic expression: conceptual, connotative, social, affective, reflected, collocative and thematic meaning. According to him, ‘Meanings are implied by various ways but the core position here is to accept the meaning as the combination of all relations creating the concept of a sign in the real world’ (1981: 4). He further says that meaning is best expressed through language and therefore the study of meaning is inseparable part of linguistics, ‘One of the keynotes of a modern linguistic approach to semantics is that there is no escape from language: an equation such as *cent – hundredth of a dollar* or *salt = NaCl* is not a matching of a linguistic sign with something outside language; it is a correspondence between two linguistic expressions, supposedly having the same meaning’ (1981: 4). In the

discussion of meaning, Leech also considers the linguistic competence of the native speaker of a language; that is, 'the provision of rules and structures which specify the mental apparatus a person must possess if he/she is to know a given language. Speakers are not only able to distinguish between well and ill formed grammatical sentences, but can also recognize 'unsemantic' utterances from the point of view of meaning' (1981:5). Consequently Leech gives the primary importance to logical meaning or as he calls it conceptual meaning, the type of meaning he mentions with relation to semantic competence of speakers and their ability to recognize 'unsemantic' utterances.

Conceptual meaning has been also labeled as 'denotative' or 'cognitive' by other studies, but it is generally described as the core aspect in linguistic communication. According to Leech (1981: 9) conceptual meaning is 'the essential ingredient to the functioning of language because in its organization it resembles the organization of language on the phonological and syntactic levels'. Leech points out two structural principles which are own to all linguistic patterns: the contrastiveness and the principle of structure. He claims that all conceptual meanings of language can be studied on the basis of their contrastive features and their structural qualities. He gives an example of the contrastive features combined in the word 'woman', which can be specified as + HUMAN + ADULT - MALE, in distinction to 'boy', which would be defined as + HUMAN - ADULT + MALE. Then he presents the syntactic pattern of a sentence with its constituent parts where he shows how smaller linguistic units form larger units (determiner + noun = subject; subject + predicate = sentence; etc.) and draws a parallel between this aspect of the organization of language and the organization of conceptual meaning. He continues (1981: 11) that: 'the aim of conceptual semantics is to provide, for any given representation of a sentence, a configuration of abstract symbols which is its semantic representation, and which shows exactly what we need to know if we have to distinguish that meaning from all other possible meanings in the language, and to match that meaning with the right syntactic and phonological expression.' We may close this preliminary discussion of meaning by Lyon's (1977: 4) warning that unless meaning is given a

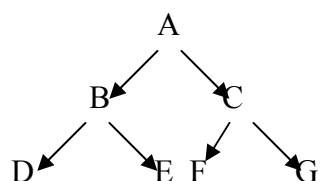
technical definition we can hardly expect it to be used consistently: "The word 'meaning' is a word of the ordinary, everyday vocabulary of English. (It can be matched at least roughly with words in other languages: 'signification' in French, 'Bedeutung' in German, etc. But this process of matching is itself of considerable interest, in that there may be no other language in which all the senses of the English verb 'to mean' or the noun 'meaning' are covered by a single word.)".

2.1.2. Lexical fields

Aitchison (2003: 5) says that: 'Words are not just stacked higgledy-piggledy in our minds, like leaves on an autumn bonfire. Instead, they are organized into an intricate, interlocking system whose underlying principle can be discovered.' The notion of a structure in semantic organization of lexical items proposed by Aitchison is one of the central areas of our analysis. One of the methods used by our research of lexical gaps proposes to look at such structures as lexical fields. Therefore, we will determine the occurrence of lexical gaps on the grounds of the vacancy in the structural organization of a certain conceptual field. Thus the one of the central terms in our study of lexical gaps is the term 'lexical field'. Description of the lexis in forms of lexical fields is the basis of viewing it as a system. As Lyons (1977: 252) shows it affects the way the meaning of words is viewed: 'The vocabulary of a language as an integrated system of lexemes interrelated in sense. The system is in constant flux. Not only do we find previously existing lexemes disappearing and new lexemes coming into being throughout the history of a language; the relations of sense which hold between a given lexeme and neighbouring lexemes in the system are continually changing through time. Any broadening in the sense of one lexeme involves a corresponding narrowing in the sense of one or more of its neighbours'. In our point of view the continuity and flexibility of the language system is the major difficulty related to our own study of lexical gaps. However efficient our method is the revealed results will be affected by the subjective approach of our work and its synchronic view at the language.

It is a central LyonsAccording to Trier, continues Lyons, it is the biggest deficiency of traditional diachronic semantics is 'to catalogue the history of changes in the meanings of individual lexemes atomistically, or one by one, instead of investigating changes in the whole structure of the vocabulary as it has developed through time' (1977: 252). Lyons claims (1977: 253) that 'both diachronic and synchronic linguistics must deal with systems of interrelated elements'. It has sometimes been suggested by critics that field-theory is valid only for the analysis of non-abstract words, as Baker (1992: 19) puts it: 'The idea of semantic fields is, in many cases, inapplicable and is an over simplification of the way language actually works. A large number of words in any language defy being classified under any heading.' But little evidence has been offered in support of this suggestion. Instead work on the description of the field structuring of the vocabulary has been continued by others. Lehrer (1974: 15) mentions in her work that Trier as one of the most influential figures in the beginnings of the study of lexical fields 'distinguished between lexical and conceptual fields, whereby the lexical field divides the conceptual field into parts, like a mosaic'. In addition, Cruse points out that the vocabulary of a language is 'not a collection of words scattered at random throughout the mental landscape. It is at least partly structured, and at various levels' (2004: 175). He proposes various ways of structuring and adds that we must distinguish between linguistic and semantic structuring. Linguistic structures in the lexicon are defined linguistically and the structures which he was occupied with in his study of lexical fields are defined semantically, in terms of meaning relations. He continues (2004: 175) that 'the semantic structure will be reflected in the linguistic form and that structures in the lexicon therefore may have a phonological, grammatical or semantic basis'. There are several types of structures suggested in Cruse's study and some of them will be more appropriate for our purposes than others. According to Cruse (2004:176): 'branching hierarchies are one of the most important types of paradigmatic structure in the lexicon'. He illustrates branching hierarchy in the following example:

Fig. 1 Cruse's branching hierarchy



This type of hierarchy can be further characterized in terms of two relations, ‘a relation of dominance and a relation of differentiation. The relation of dominance is the one which holds between A and B, A and C, B and D, B and E, C and F, C and G in Fig. 1. The relation of difference is the one which holds between B and C, D and E, F and G’ (Cruse: 176).

When a hierarchy is well formed, the descending branches never come together. As Cruse explains the so-called ‘unique mother constraint’ ensures that each element (except A) has only one immediately dominating element. Hierarchies with such an organization of elements can be further divided in taxonomic hierarchies or meronomic hierarchies. Other types of structure are linear structures which Cruse groups into different categories as bipolar chains, monopolar chains, degrees, stages, measures, ranks and sequences. Interesting from our point of view are so called grids which are generated by recurrent concrete sense relations. We may illustrate a grid structure by using Cruse's (2004: 188) example:

a) *man woman* b) *take steal* c) *dog puppy* d) *hand finger*
 ram ewe *kill murder* *cat kitten* *foot toe*

Cruse further proposes clusters which are essentially groups of synonyms, rather less sharply defined and organized into the field than the previous structures. Cruse makes a distinction between two types of clusters, centred and non-centred. The former has one or two core items and some peripheral items grouped around the core. Cruse uses the example of a centred cluster organized around the word ‘*die*’ as the core item and ‘*pop off*’, ‘*pass away*’, ‘*decease*’, ‘*kick the bucket*’ as the peripheral items. For an item to become the centre of a cluster it should be expressively neutral, stylistically unmarked and propositionally superordinate. The non-centred cluster has no core item and its items spread over a spectrum of the semantic field. An example of

non-centred cluster is a group of words referring to sounds '*rap*', '*tap*', '*knock*', '*slap*', '*bang*', etc. Cruse mentions that clusters may overlap which would be unusual for taxonomic and meronomic hierarchies. This overlapping aspect of lexical structures is considered from our point of view, because we believe that some of the gaps proposed later in our study may be explained by the fact that lexical structures are more like a continuum rather than a rigid system.

Grids together with clusters will be investigated later in order to show the possible lexical gaps in the vocabulary of English. According to Lehrer (1974) the size of the field is crucial for speakers to come to a mutual agreement on its constituents. This means that the smaller and more specific the field, the more agreement there is among speakers on what words belong to the set. There can be also disagreement on the peripheral items of the field, whereas most of the speakers agree on the central items of a field. To conclude the discussion of lexical fields we mention several semantic relations which Lyons (1977) suggests as being important in the study of the units in a field. Relations such synonymy, incompatibility, class inclusion, antonymy, complementarity, and converseness. Although a few others could be added, and perhaps some of these can be further divided, we consider these sufficient for the illustration of the possible kinds of semantic relations between lexemes in a lexical field which will be considered in our research.

2.2. Lexical gap

2.2.1. Defining lexical gaps

Finally we arrive at the point of our work where we will define a lexical gap. Studies of lexical gaps propose different terminology and approaches. The major task here will be to categorize lexical gaps according to the previous works on the subject and to summarize the reasons proposed for the appearance of gaps in the vocabulary. As we suggested before, what is mostly meant by a lexical gap is a discontinuity in a pattern: that is to say, the absence of a lexeme at a particular place in the

structure of a lexical field.¹ According to Trier (Lyons 1977: 301) this is ‘theoretically inconceivable’ but Lyons questions Trier’s assumptions about the impossibility of a lexical gap. Lyons is not concerned in his work with the absence of ‘a lexeme denoting an object which happens not to exist in the culture in which the language operates, but rather with a lexical gap as a structural vacancy in a cultural context of a given language’(1977: 301).² To assume a lexical gap he considers the relations of the items in a field and suggests the following questions: ‘Can we have cohyponymy without an existing superordinate lexeme?’ Consequently, he (1977: 302) suggests that there is no immediate superordinate for ‘go’ and ‘come’ in English and for ‘buy’ and ‘sell’ among others. His further question is: ‘Are the terms in contrast without any superordinate lexeme?’

Let us have a closer look at gaps and review some of the definitions starting with Lehrer's discussion of lexical gaps. Lehrer (1974: 95) considers the ambiguity of terminology and says that “the term 'lexical gap' has been applied to all sorts of instances where a word is in some way missing”. She proposes the existence of phonological, morphological, syntactic, and semantic gaps. According to Lehrer (1974: 95) the search for gaps is ‘plausible only in terms of patterns, i.e. there must be some pattern or organization that can be diagrammed, for there to be a gap’. Exactly what differentiation there is between lexical gaps is the content of Lehrer's introduction to the topic. First she proposes a morpheme gap studied in phonology which refers to a possible sequence of segments that are permitted by the phonological rules but not found. Secondly, she (1974: 96) considers lexical gaps in paradigms: *cup / cups; dress/ dresses; - / trousers; chaos/ -* . According to Lehrer neither morpheme nor paradigm gaps have much to do with semantics. The third type of gap discussed in her study is a derivational gap, which may be related to meaning. These gaps are produced by putting together partially productive stems and affixes in ordinary ways, with results that are unacceptable. Her examples of the latter would be *ungood, *mistelephone, *conversate.

¹ Cf. the different approaches used by Bentivogli and Pianta, or the suggestion in 4.3. of this study

² Cruse agrees with the cultural relevance in the study of lexical gaps and this will be discussed later in this paper

These rather hypothetical considerations of gaps in the vocabulary are followed by an example of gaps more relevant to our study. This type of gap is a matrix gap that is detected when ‘related lexical items are analyzed according their semantic features and placed on a chart or matrix’ (Lehrer: 97). Lehrer takes Chomsky’s example: in English there is a word ‘*corpse*’ meaning roughly ‘*body of a dead human being*’ and a word ‘*carcass*’ meaning ‘*body of a dead animal*’, but no word which is applied to ‘*dead plant*’ (1974: 97). These are only intuitive suggestions of a gap in a certain structure concerned with the meaning relations of the individual lexical items.

Cruse discusses gaps in hierarchies. He says that we speak of a gap ‘where there is intuitive or other evidence of the existence of a well-established concept corresponding to the point in the structure where the gap occurs’ (2004: 178). His example is the missing superordinate (in English) for the set of verbs of “*going under one’s own steam on land*” (for animal or human), whose hyponyms would be *crawl*, *walk*, *run*, *hop*, *etc.* The latter would be an example of a gap in a taxonomic hierarchy, but gaps occur also in meronomic hierarchies. Cruse considers the instance of ‘*teapot*’ and asks what we call the part of ‘*teapot*’ to which ‘*spout*’, ‘*handle*’ and ‘*lid*’ are attached. Cruse also draws the attention to the cultural relevance of concepts related to gaps. He says (2006: 93) that ‘It is not usual to speak of a lexical gap when a language does not have a word for a concept that is foreign to its culture: we would not say, for instance, that there was a lexical gap in Yanomami (spoken by a tribe in the Amazonian rainforest) if it turned out that there was no word corresponding to *modem*. A lexical gap has to be internally motivated: typically, it results from a nearly-consistent structural pattern in the language which in exceptional cases is not followed.’³

Similarly, Fischer (1998: 2) confirms that ‘to postulate lexical gaps, one needs a theory of lexical structure and a methodology to locate them.’ He suggests the term ‘structural gap’ in relation to Lehrer’s previous example of a matrix gap above concerning the grid ‘human-corpse’, ‘animal-carcass’, ‘plant-?’ with an empty space for a lexeme defining a dead plant. Fischer calls this

³ We will have to discuss this cultural constraint later when we study the way of filling lexical gaps in Czech, neologisms.

type of gap structural and not functional because in terms of functionality “one may always paraphrase it with dead plant when there is an ad hoc need to express a concept, and according to him the term 'lexical gap' simply indicates a structure point in a lexical configuration which is not occupied by a lexicalized item” (1998: 4).

Furthermore, Fischer (1998: 5) concentrates on the proportional series (grids) of kinship terms:

Fig. 2 Kinship terms

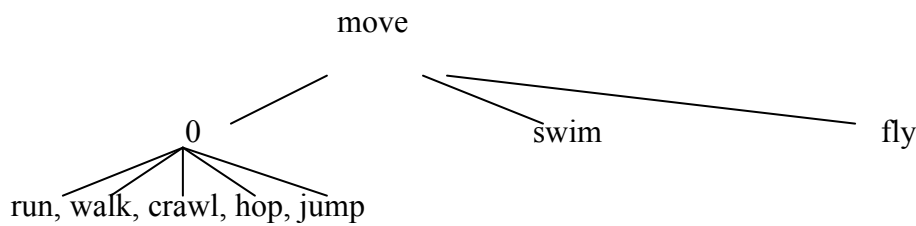
| generic (sg.) | male | female |
|------------------|---------|----------|
| ?parent | father | mother |
| child | son | daughter |
| ?sibling | brother | sister |
| ? | uncle | aunt |
| ? | nephew | niece |
| cousin | cousin | cousin |

He explains that the generic terms corresponding to *uncle/aunt* and *nephew/niece* ‘respectively appear to be genuine lexical gaps and the terms *parent* and *sibling* are marginal’ (1998: 5). All the terms from the grid, Fischer says, belong to the everyday core vocabulary of English, but these two *sibling* and *parent* are formal and perhaps written rather than spoken. So the issue of register is considered in their cases.

Fischer when discussing the existence of lexical gaps asks how they can be explained. He suggests three main factors or reasons causing gaps to occur, namely: psychological salience, perceptual salience and prototypicality. To illustrate psychological salience he recalls the example of kinship terms and the missing gender-neutral term for uncle/aunt or nephew/niece. He continues (1998: 10) by saying that mother and father, brother(s), sister(s), uncle(s) etc. ‘are people one knows intimately as individuals and refers to them as individuals’. He explains that as individuals they are one’s mother or father, not my parent and thus the semi-technical term *parent* and *sibling* is not used. Consequently, there would not be need for general terms for uncle/aunt or nephew/niece. Similarly, the gap among the verbs of locomotion also can be explained on the grounds of

psychological salience. People naturally move on land and they do it in many ways proposed by the terms *run*, *walk*, *crawl*, *etc.* Swimming and flying by contrast, says Fischer, ‘are less common forms of locomotion and therefore psychologically more distant’ (1998: 11). Fischer explains that the two general terms on the second level in Fig. 3 are probably a reflection of this. See Fig. 3

Fig. 3 Fischer's example of psychological salience – 3 levels of distance of words



To look at the possibility of perceptual salience in the existence of lexical gaps Fischer uses the example of following proportional series:

Fig. 4 Fischer’s example of perceptual salience

| having a sense or faculty (verb) | not having a sense or faculty (adj.) |
|----------------------------------|--------------------------------------|
| see | blind |
| hear | deaf |
| smell | ? |
| taste | ? |
| feel | ?numb |
| speak | dumb/mute |
| walk | lame |

Fischer (1998) says that ‘on the one hand if a person is blind or lame, one can usually see the defect; if he or she is deaf of dumb, this becomes apparent as soon as we try to communicate. On the other hand, not being able to smell or taste, however, is not detectable, except by the person affected by it’ (1998: 11). This factor can, according to Fischer, overlap with the psychological factor.

Prototypicality says that speakers judge some members of taxonomies as ‘better’ or more ‘central’ than others. The most central items of a hierarchy are then called prototypes. Fischer says (1998: 11) that ‘it would be easy to imagine a prototypical dog or horse, but what does a prototypical bovine animal look like?’ According to Fischer because of the missing prototypical member, in our case the prototypical ‘cow-cum-bull’, the non-existence of a lexical item is justified. Fischer's explanation seems to be incomplete and this is sometimes reflected in our research too. In order to claim an occurrence of a lexical gap we will have to consider concepts which are unusual and problematic and consequently, we will have to provide an explanation of our results. In the case of the prototypical ‘cow-cum-bull’, we may suggest that ‘cow’ is used among speakers without considering the fact whether this is the best prototypical concept from the field.

A problematic inconsistency concerns Fischer's and Lehrer's term ‘functional gap’. Fischer, in addition to his term ‘structural gap’, also briefly mentions the term ‘functional gap’ when explaining *human/animal/plant* series and says (1998: 4) that: “...reveals a lexical gap for ‘dead plant’. Note that this, like any lexical gap, is only a structural and not a functional one. Paraphrases like *dead plant* can always be used when there is an *ad hoc* need to express a concept, and the term ‘lexical gap’ simply indicates a structure point in a lexical configuration which is not occupied by a lexicalized item”. It seems that Fischer says that all lexical gaps are only structural and not related to functional gaps at all.

In comparison Lehrer proposes is a functional gap, which she says is the most salient for most speakers. However, many functional gaps, she says (1974: 105), ‘will coincide with some other kind of gap’ she mentioned before, i.e. ‘derivational gap’, ‘matrix gap’, etc. In Lehrer's view a functional gap is ‘the lack of a convenient word to express what speakers want to talk about’ (1974: 105). She gives an example of a functional gap in the field of cooking where there is no word in English for cooking on a hot surface without water or oil. She adds that ‘although functional gaps may coincide with other kinds of gaps they do not all result from matrix or derivational gaps’

(1974: 105). We think that Lehrer does not completely reject the idea that functional and other kinds of gaps, including matrix gaps, are in some way related.

So far, we have investigated gaps as a phenomenon occurring in a given language independently of other languages. To take a different view, we look at Bentivogli and Pianta (2000) and their research of lexical gaps. They are concerned with a contrastive study of gaps in English and Italian. Their research is the basis for the second part of this paper's search for lexical gaps in English as compared to Czech. So how in fact do they identify a gap? To understand and follow their methodology one must first understand the terms they use and distinguish in their study. We may start by listing types of differences between source and target language according to Bentivogli and Pianta (2000: 3):

- Syntactic divergencies: the translation equivalent (TE) does not have the same syntactic ordering properties of the source language word. Ex: the man entered the room = l'uomo entrò nella stanza.
- Lexicalization differences: the source and target languages lexicalize the same concept with a different kind of lexical unit (word, compound or collocation) or one of the two languages has no lexicalization for a concept (lexical unit vs. free combination of words). In the latter case we have a so-called **lexical gap**. Ex: private = soldato semplice (collocation); to dam = sbarrare con una diga (**gap**).
- Divergences in connotation: the TE fails to reproduce all the nuances expressed by the source language word. Ex: fanciullo (literary) = child
- Denotation differences: the denotation of the the source language word only partially overlaps the denotation of the TE. Ex: convento = monastery (for monks), convent (for nuns).

For them (2000:3) 'a lexical gap occurs whenever a language expresses a concept with a *lexical unit* whereas the other language expresses the same concept with a *free combination of words*.' Their example is '*borrower*' = '*chi prende in prestito*'. They make the distinction

between idioms, restricted collocations and free combinations of words. While idioms and restricted collocations can be considered as ‘composite lexical units, free combinations do not belong to a language lexicon and imply a lexical gap’ (2000: 3). To summarize the terms, Bentivogli and Pianta (2000:3) propose that: ‘1. an *idiom* is a frozen expression whose meaning cannot be built compositionally from the meanings of its component words. Also, the component words cannot be substituted with synonyms. 2. a *restricted collocation* is a sequence of words which habitually co-occur and whose meaning can be built compositionally. They allow only a limited substitution of their component words, which have a kind of semantic cohesion mainly due to use. Collocations spring to mind readily, are psychologically salient, and do not usually have a literal translation in other languages. And last, 3. a *free combination* is a combination of words following the general rules of syntax: the elements are not bound specifically to each other and so they occur with other lexical items freely.’ It is usually difficult to found out whether there is a strict boundary or not between the collocation and free combination of words. According to Bentivogli and Pianta the three sets of lexical structures they studied display a certain amount of regularity which can be used in automatically driven research.

Bentivogli and Pianta’s research does not include the view that a lexical gap is observable only as a missing part in a pattern. This is in contrast to Fischer, Lehrer and Cruse and their stressing the importance of structural aspect of gaps. In our view Bentivogli and Pianta’s definition of lexical gaps, i.e. a lexical gap is a TE containing a free combination of words, is more related to a functional gap discussed by Lehrer. The problem of terminology is one of the major issues in our study of lexical gaps. We discussed in the previous section concerned with defying the term ‘lexical gap’ that Lyons and others propose the structural necessity for a gap to occur. Cruse concentrates on hierarchies and the missing nodes or points in them. Lehrer sees as the most obvious type of gap a matrix gap (a vacancy in a pattern). For Fischer, gaps are structural phenomenon, they are missing lexical items for a place in the

structure. We suggest considering these gaps conditioned by the existence of a structure ‘prototypical lexical gaps’. Finally, Bentivogli and Pianta carry out a contrastive search for gaps and conclude that gaps are found in a language, if a language expresses in a lexical unit what the other language expresses with a free combination of words. This is in our view in contrast to the previous studies, because Bentivogli and Pianta do not consider the necessity of a structure to be crucial for occurrence of gaps and therefore we relate their gaps to the term ‘functional gap’ in Lehrer’s and Fischer’s work. Nevertheless, we consider their method in our study and use it in order to see what kind of gaps it can reveal and whether these can be useful for our further discussion.

2.2.2. Constraints on lexical gaps

In her discussion of gaps Lehrer (1974) uses Morgan’s term ‘possible lexical item’. What does it actually refer to? To distinguish between possible and impossible lexical items, we must consider the grammatical structure first. There are certain rules applying to grammar and these should be obeyed by language speakers. Lehrer (1974: 102) describes Morgan’s restrictions on the constituents as follows: ‘a whole sentence cannot be replaced by a single word and verbs cannot apparently incorporate referential indices.’ So, Morgan claims that in the case of impossible lexical items there is no question of postulating lexical gaps. “Thus ‘Henry decapitated the cat.’ implies that no verb ‘*dechocotate*’ can apply to a real cat named for example Choco” (1974: 102). Lehrer further evaluates the restrictions on gaps through impossible lexical items and adds that not all possible lexical items for which there is no term are instances of gaps. Her constraints are listed below (Lehrer: 104):

1. There are no gaps for impossible concepts. This would rule out postulating gaps for ‘castrated woman’ or ‘round square’
2. There are no gaps for nonexistent object, situations etc. This constraint is too strong as it stands, since language is used to talk about fictional worlds as well as the real world.

3. In order for there to be a lexical gap, there must be at least one member in each row or column of the matrix of parameters. Although it would be possible to have a word for 'green bottle', the lack of such word is not a gap because color is not a parameter for any container.
4. A component must appear in at least one word in a field in order to be used in postulating a gap.
5. The components relevant to postulating gaps are limited to the basic words in a lexical field. The components found in peripheral words are not relevant in postulating gaps.

2.3. Approaches to lexical gaps

It has been already said in this paper, a lexical gap can be found in a lexical structure. We also saw that gaps are localized as missing translation equivalents in languages. Most of the researchers we discussed used the first or the second hypothesis as their main starting point. To organize our review, we divided the approaches according to the author's main aim of study, i.e. whether they were mainly discussing the gaps as a phenomenon in one language based on the structural aspect of gaps (Cruse, Lehrer, Fischer), or whether they used a bilingual contrastive approach as their main point of view (Bentivogli and Pianta).

2.3.1. Structural approaches (in one language)

The defining of gaps in the previous parts of this paper has already revealed the most important aspects of the approach which we call structural. We mentioned Cruse and his taxonomies or other types of lexical fields, which we would include here. We looked at Fisher's and Lehrer's work. They all share the central fact in their research and that is the possibility of a lexical structure as an organizing principle of the vocabulary of a language. They use comparison with other languages only as a marginal technique to identify gaps. They usually try to point to an empty space (slot) in the structural field of a language (in their instance English) and consider the possibility of a lexical

gap. We decided to concentrate on Lehrer's study in order to summarize this point of view at the problem of gaps.

Lehrer calls one of her examples of gaps in a field a matrix gap. She analyzed Chomsky's example of a missing lexical item in the matrix (chart) of 'make grow'. There is according to Chomsky a general term 'to raise' used with reference to humans, animals or plants which can be replaced by the verb 'to rear' for humans, 'to grow' for plants, but there is no such verb applying to animals. Lehrer notes that 'possibly *breed* could be used' (1974: 108). Similarly there is no term to describe a dead plant with (cf. in Czech the word 'souška'), as there is 'corpse' for humans and 'carcass' for animals. Lehrer (1974: 97) places all above mentioned terms in a chart (matrix) to illustrate her view. She evaluates this point more by the example of species in the following chart.

Fig. 5 Lehrer's chart of species illustrating matrix gap

| Species | male | female | young |
|----------|----------|--------|-------|
| Human | man | woman | child |
| Horse | stallion | mare | foal |
| (cattle) | bull | cow | calf |
| Pig | boar | sow | shoat |
| Dog | ? | bitch | puppy |
| Chicken | rooster | hen | chick |

Lehrer proposes a gap for an item describing a male dog which would exclude other meanings included in the general term '*dog*', she says that some people would suggest '*stud*' but that is rather a technical term for male counterparts in the animal kingdom. Her main point here is that if we extend the matrix along both axes we get a large number of gaps. For example, she adds that there is no lexical item for young '*rat*', '*salmon*' or '*mosquito*'.

Lehrer (1974: 99) discusses her approach in terms of compositionality of lexical terms. Lexical items can be assigned several specific features according to which we may later make further distinctions. She (1974: 99) uses the lexical field of cooking terms and assigns the individual verbs in the field parameters like 1) water or no water 2) oil or no oil 3) food submerged

in liquid 4) little or large amount of liquid 5) gentle or vigorous cooking action 6) fast or slow cooking speed. Her list could be extended by many more aspects one can observe in the different processes of cooking. Lehrer herself suggests other possibilities of cooking, but excludes them for various reasons from her discussion, but mostly to limit the scope of her analysis. To add other parameters would be possible according to her and thus to 'widen the possible number of combinations of these' (1974: 99). Her parameters are chosen on the basis of her observations and can be altered if discussed by professionals in the cooking industry. Lehrer looks at the basic words in the cooking field: *boil, steam, fry, bake, roast, broil* and their components. After contemplating the possible combinations of the parameters she (1974: 100) proposes lexical gaps for: 'cook gently in a small amount of fat in the oven for a long time, i.e. (slowly); cook vigorously submerged in a large amount of water under a broiler (radiated heat) for a long time; cook gently in a pan for a short time.'

She summarizes her findings and says that for some of the combination of words suggested by the matrix there are no lexical items, because the possibility of their combining in the real life is very small. Only for illustration, she (1974: 100) says that there is no need to fill the lexical gap for a combination like: 'cooking with water at a high temperature, where she claims that it is usually preferred to cook in water gently as not to boil out the liquid.' Lehrer later limits the search and identifies gaps in the cooking field for: 'cooking with oil under direct heat, and for cooking on a hot surface without water or oil' (1974: 106). Lehrer discusses the functionality, i.e. the need for filling the gaps felt by speakers, and suggests (1974: 106) that only the latter creates a functional gap. Her conclusion can be questioned by people experienced in the field of cooking, but this passage rather shows how Lehrer and others locate, identify and analyze gaps on the basis of structural comparison of fields or the individual components of lexical items in the fields. It also shows the complexity of the topic of lexical gaps and how difficult it will be for us to choose the criteria for our study.

2.3.2. Contrastive approaches (in two languages)

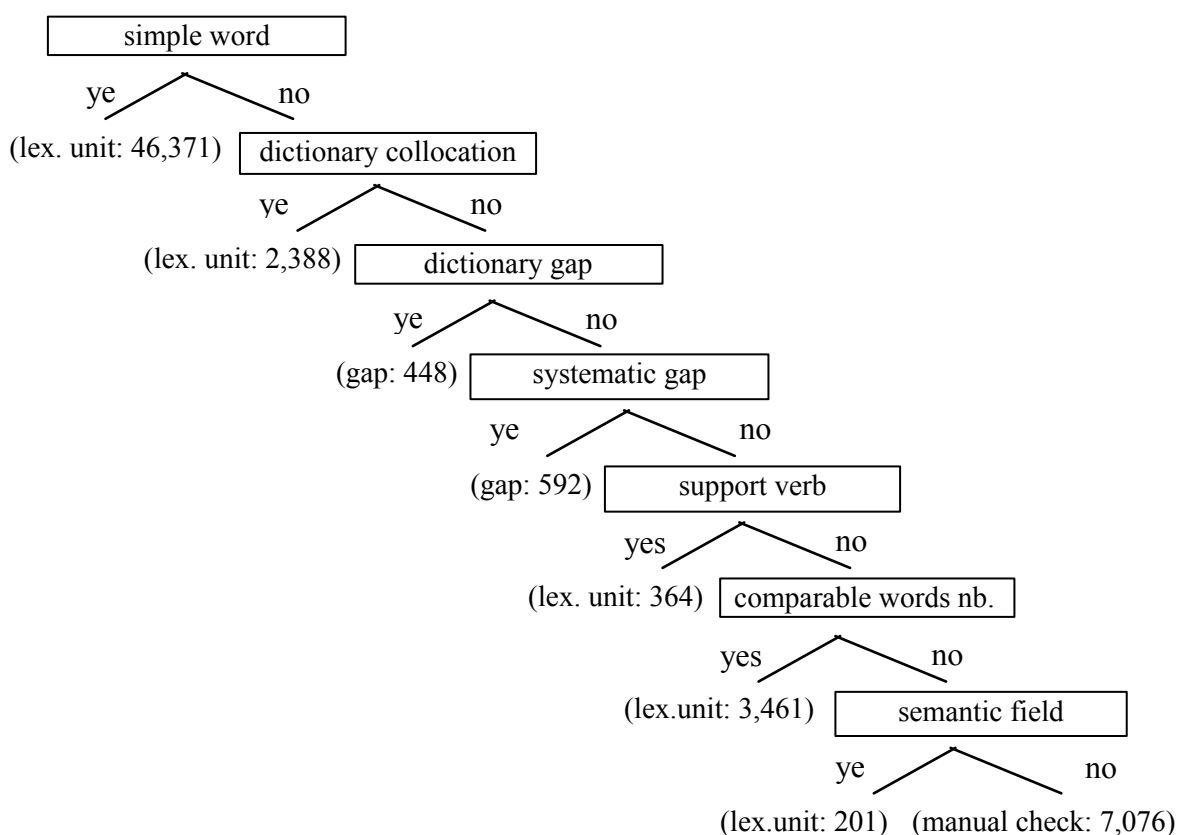
We introduced Bentivogli and Pianta's research of lexical gaps in the previous chapters. The difference from the approaches mentioned above, such as Lehrer's and others', is that these authors use two languages in order to locate and identify gaps and that they do not discuss the structural aspect of gaps. Their work is corpus-based and we will present the main points and strategies of their work. They make a quantitative evaluation of the English-to-Italian lexical gaps, using the electronic version of the Collins bilingual dictionary and of the DISC monolingual Italian dictionary. The bilingual Collins included in the English section 40,959 headwords and 60,901 translation groups. By 'translation group (TGR)' they mean a group of Italian synonyms translating a sense of an English word. In bilingual dictionaries, TGRs are usually separated by semicolons, numbers or letters' (2000: 3). To illustrate the term TGR we insert the following example from their paper:

"wood", as a noun, has 5 TGRs

wood [wUd] **1. n** **a.** (*material*) legno; (*timber*) legname (m) **b.** (*forest*) bosco **c.** (*Golf*) mazza di legno; (*Bowls*) boccia **2. adj** **a.** (*made of wood*) di legno **b.** (*living etc. in a wood*) di bosco, silvestre (Bentivogli and Pianta: 3)

On the grounds of this information Bentivogli and Pianta then determine the count of free combinations used in Italian to translate the word 'wood' from English, as this can imply a gap. They are aware that the Collins does not contain all English lexical units, but assume that 'the 60,901 TGRs listed in the Collins can be considered a significant sample to estimate the percentage of English-to-Italian lexical gaps' (2000: 4) Their procedure involves sorting the extracted data according several principles, i.e. all the TEs which are free combinations of words, collocations or single words must be first organized according to the following steps: 1. the TGR is a simple word; 2. the TGR is listed as a collocation; 3. the TGR is marked as a free combination of words (which some dictionaries provide); 4. the TGR includes a multiword structure containing certain adverbs of

manner; 5. the TGR includes support verb constructions, e.g. '*dare istruzioni a*'; 6. the TGR includes multiword phrase with a number of words comparable to that of the English headword; 7. the TGR is labelled with a gloss specifying a semantic field. Subsequently they classified the subclasses in three main groups: lexical units, lexical gaps and TGR that need to be manually checked. They (2000: 5) propose that the classification is a kind of decision tree procedure illustrated below:



research are similar or not. The gaps revealed by their method are not listed in their summary and we cannot use their results to classify the gaps in our own research.

2.4. Dealing with lexical gaps

The last thing to discuss before we present our own research analysis is the question of how speakers deal with lexical gaps. First a few words on the strategies language communities use to cope with gaps in their language independently of another language and secondly we shall mention the problem of translation between languages with missing TEs.

Cruse who discusses lexical gaps in hierarchies introduces the term autotaxonomy. He says that (2004: 178) ‘a possible gap or its space in the lexical field can be filled by extension of the sense of an item immediately above, i.e. its superordinate’. He notes the difficulty of distinguishing the original sense of the word used to fill the gap from above. The following (2004:178) will illustrate this (the readings marked with 1 are superordinates of those marked 2):

- 1a A:Haven't you got any trousers¹ to wear?
 B:Yes, I've got my new jeans.
1b A:Are you going to wear your jeans?
 B:No, I think I'll wear my trousers².

The general term *trousers* from 1a is used in 1b as its own hyponym. Similarly, Cruse speaks of automeronymy (2004:182): ‘Automeronymy is when a part and immediate whole have the same name (but distinct senses, cf. autohyponymy)’. A good example of this Cruse finds in the human body meronymy: ‘The term *body* is used both for (i) for the whole ensemble and (ii) as a close equivalent to *trunk* (it is, in fact, perhaps the more usual term). It is *body* in sense (ii) which is the metaphorical source of the suggestions of *body* for the main parts of teapot and spoon, other example can be *arm*, *arm* (*arm*+*hand*)’ (2004: 182).

Fischer points out the example of the absence of a common gender pronoun of the 3rd person singular, and the problem this has created in the recent past. He feels that “the use of ‘he’

referring to babies for example in general is unsatisfactory today” (1998: 13). According to Fischer this is a motivated gap and one which is difficult to fill. He proposes to deal with this gap by using *they* which has become common in some contexts. Lehrer (1974:96) mentions some procedures of how gaps can be supplemented and says that ‘there are standard ways of filling the gaps in some cases’. As in the example of the missing past form of the modal *must* where English has substituted this with *had to*.

The problem of a gap in a language is best illustrated in the comparison with other languages and as Lehrer says that a translation-revealed gap is one which is best realized by speakers. She calls this gap ‘*functional*’ and says that ‘this kind of gap usually coincides with some other kind of gap, but not all result from matrix or derivational gaps’ (1974: 105). These gaps or lack of TEs in languages pose a great problem for translators. Lehrer says that a functional gap is often filled by borrowing from other languages and gives example of *déjà vu*. This overlapping nature of different kinds of gaps showed in Lehrer’s study leads us to the discussion of the ways in which speakers fill the gaps, precisely, to discuss borrowings from other languages in order to fill these functional gaps. The strategies of coping with gaps between languages are well-known in the theory of translation and extensively discussed by Newmark and others.

Newmark raises the question of how to translate a document and avoid loss of meaning. He says that the main aim of the translator is to produce the same effect on his readers as much as possible as was produced on the readers of the original (1981: 12): ‘The principle is variously referred to as the principle of similar or equivalent response or effect, or of functional or dynamic equivalence.’ He (1981: 12) stresses three rules each translator should follow: ‘(a) the translation should be as literal as possible and as free as is necessary; (b) a source language word should not normally be translated into a target language word which has another primary one-to-one equivalent in the source language (*schwarz* should not be translated as *dark*); (c) a translation is impermeable to interference – it never takes over a typical source language collocation, structure or

word-order.’ According to Newmark all types of writing are specific regarding their content and they consequently require an individual type of translation (1981: 13): ‘Every word has to be rendered, differences in terminology and function noted, and as much attention paid to the content as to the intention and to possible interpretations and misinterpretations of the text. He stresses too that the translator is always at risk in narrowing the semantic area of a word (1981: 182): ‘If he (a translator) suspects that the source text writer intended to use a large, easily adaptable and disposable phrase, he must retain it in English, even though English does not embrace such abstractions so easily and he goes on by claiming that, “On no account must the foreign equivalent of ‘*accommodation unit*’ be translated as ‘*house*’. The translator should be always looking for linguistic and/or semantic universals, those are lexical items that have more or less the same application in two or more relevant languages, sometimes called isomorphous units” (1981: 182).

This opens the question of gaps. What if there is no translation equivalent in a given language to use in order to translate a word from the source language? In the case of a missing TE in a target language we may speak about a gap according to Bentivogli and Pianta. However, they consider only TEs which are free combinations of words to be gaps. In contrast to other studies we mentioned, the semantic aspect of the gaps in Bentivogli and Pianta’s work is not discussed to the same extent, nor is discussed the need for a pattern or structure as in Lehrer’s or Fischer’s study. Can we consider the gaps which are proposed by Bentivogli and Pianta to be true lexical gaps? We already said that in our study we will relate the gaps found according to Bentivogli and Pianta’s research to functional gaps discussed by Lehrer.

According to Baker (1992: 18) ‘most languages are likely to have equivalents for the more general verbs of speech such as *say* or *speak*, but many may not have equivalents for the more specific ones. This is in agreement with the fact that most languages tend to make only those distinctions in meaning which are relevant to their particular environment.’⁴ She continues that the

⁴ Cruse also suggests that concepts should be relevant for the language community in order to be considered lexical gaps (2006: 93)

more specific a semantic field is in a language, the more different it is likely to be from related semantic fields in other languages. In order to deal with such 'non-equivalence' as she calls it, translators adopt different strategies. Among them she names for example a translation by a more general word (superordinate) or a translation by a more neutral/less expressive word (1992: 27).

In the view of Baker's study the lexical fields of different languages may differ. In addition Lehrer (1974) discusses functional gaps as a phenomenon possibly related to other kinds of gaps in her study. She says that the usual way 'of filling functional gaps is borrowing from other languages' (1974: 105). This interrelation between different kinds of gaps and functional gaps together with the way of filling functional gaps by borrowing (among others) allows us to suggest that in order to find other gaps in a vocabulary of a given language we may consider neologisms as lexical units pointing to a vacancy in a language which is quite similar to that of a functional gap.

Newmark (1988) explores the problem of filling such gaps in his chapter '*The Translation of Neologism*'. He says that 'neologisms can be defined as newly coined units or existing lexical units that acquire a new sense' (1988: 140). It is useful for us in this paper to consider neologisms, because it is actually neologisms and transferred words which not only fill the gaps in a language, but also point back to the place in a language's lexicon where the empty slot was filled and thus may disclose other possible gaps in the surrounding semantic area of a vocabulary. It may be true that a receiving language adopts a whole lexical field with new terms but it can be also considered that the field in the donor language is simply more specific than the field in the receiving language. We suggest that neologisms occur in a lexical field which is not necessarily wholly implemented with the borrowing or coinage, but such a field may already exist in the target language. In order to distinguish gaps revealed by studying neologisms in a language from 'prototypical lexical gaps' and 'functional gaps', we propose a working term 'lexical blank'.

Newmark (1988: 141-148) summarizes the possible kinds of neologism and their translation in the following way: 1. Neologism can be an old word with new senses. This type of

neologism usually does not refer to new objects or processes, and therefore are rarely technological.

2. Neologism can be a new coinage, but there is a hypothesis that there is no such thing as a brand new word; if a word does not derive from various morphemes then it is more or less phonaesthetic or synaesthetic. All sounds or phonemes are phonaesthetic, have some kind of meaning.
3. Neologism can be a derived word, derived by analogy from ancient Greek and Latin morphemes usually with suffixes such as –ismo, - ismus, etc.
4. Neologism can be whole collocations, which is usual in the social science and in computer language. For example ‘*sexual harassment*’ or ‘*domino effect*’.
5. Neologism can be eponyms, i.e. any word derived from a proper name. For example ‘*Thatcherism*’.
6. Neologism can be a transferred word, which usually keeps only one sense of its foreign nationality. They are likely to be economic terms.
7. Neologism can be a acronym, which are increasingly common for reasons of brevity and euphony.

To fill the lexical blank, to create a neologism one must make sure that the new word is not already covered by another lexical item. Newmark says (1988: 149) that: ‘Translators have to check all sources to find out whether there is already an existing translation equivalent and whether the referent exists in the TL environment and whether it is necessary to create a new word’. Newmark concludes his discussion of neologism by introducing (1988: 150) a frame of reference for the translation of neologisms:

A FRAME OF REFERENCE FOR THE TRANSLATION OF NEOLOGISMS

| <i>Type</i> | <i>Contextual factors</i> | <i>Translation procedures</i> |
|--|--|--|
| A. <i>Existing lexical items with new senses</i> | 1. Value and purpose of neolog | 1. Transference (with inverted commas) |
| 1. Words | 2. Importance of neolog to (a) SL culture; (b) TL culture; (c) general | 2. TL neologism (with composites) |
| 2. Collocations | | 3. TL derived word |
| B. <i>New forms</i> | 3. Recency | 4. Naturalisation |
| | 4. Frequency | 5. Recognised TL translation |
| 1. New coinages | 5. Likely duration | 7. Functional term |
| 2. Derived words (including blends) | 6. Translator's authority | 8. Descriptive term |
| 3. Abbreviations | 7. Recognised translation | 9. Literal translation |
| 4. Collocations | 8. Existence of referents in TL culture | 10. Translation procedure combinations (couplets etc.) |
| 5. Eponyms | 9. Transparency or opaqueness of neolog | 11. Through-translation |
| 6. Phrasal words | 10. Type of text | 12. Internationalism |
| 7. Transferred words (new and old referents) | 11. Readership | |
| 8. Acronyms (new and old referents) | 12. Setting | |
| 9. Pseudo-neologisms | 13. Fashion, clique, commercial | |
| 10. Internationalisms | 14. Euphony | |
| | 15. Is neolog in competition with others? | |
| | 16. Is neolog linguistically justified? | |
| | 17. Is neolog likely to become internationalism? | |
| | 18. Is neolog (acronym) being formed for prestige reasons? | |
| | 19. Milieu | |
| | 20. Status and currency of neologism in SL | |

Finally, a few words about Czech and its need to deal with missing lexicalizations in connection with English. English is one of the most frequent sources for Czech language community when it comes to borrowing and adapting new lexical forms. The growing need for new terms for new concepts was mentioned earlier in this study. This ever-increasing demand for new words is due to the development in society and all its areas. Nekula says (2004: 263) that English has been the source of new words in Czech for a long time, but it has made the greatest contribution only recently. Since the new technologies and ways of communication literally linked the world

together, English has become one of the most powerful communication means. Nekula enumerates the various reasons for borrowing from English into Czech and among them is also the reason to fill the vacancy in Czech (2004: 267): ' V ýskyt anglických prvků v českých textech je motivován různě [...] jde i o užití výstižného pojmenování, které v češtině chybí.' By saying this Nekula confirms the possibility of missing appropriate lexical items in Czech for describing existing concepts, thus he suggests vacancies in Czech. We suggested calling these vacancies 'lexical blanks' for the purpose of our study.

It has not always been easy for the two languages to be in contact. Mainly, the recent changes in society, political and social, have made the cross-cultural contact easier and various language forms more accessible for different language communities. The process of globalization has been finalized with the internet and mainly social networks in the recent years. There are many areas where Czech needed to borrow from English a word in order to fill up the vacancy in its vocabulary, but some of these areas are more prominent than others, Nekula mentions the following: economics, bank sector, trade, services, fashion, cosmetics, engineering, IT, communications, politics, marketing, media, show business. Lastly Nekula speaks about scientific studies and educational institution being affected by English that has become the main language of many subjects studied in Czech universities. To say that all English and other foreign words assimilated into Czech are results of gaps would be simplifying the matter, however, we can presume that not all the concepts that are addressed by English terms in Czech communities could find an appropriate and effective Czech term to name them. Let us call this phenomenon a lexical blank and look at some of these blanks later in our study to see what domains are affected and what lexical material is used to fill them.

3. The aim of the study, its method and data

The aim of this paper is to consider the possibility of lexical gaps in Czech and English, to show possible methods of finding lexical gaps in a language, to characterize these gaps if found and survey the potential areas in the vocabulary that could be typical for the occurrence of gaps. Partially, we will also evaluate the effectiveness of the methods used for finding gaps and we will comment on the lexical material used to fill lexical gaps in a language. The approach to the phenomenon is based on the assumption that in a vocabulary of a given language there can be found concepts that do not have a lexical label in that particular language community. Our hypothesis is that such lexical gaps can be located independently of or comparatively with other languages.

The first part of our research will focus on English and the possibility of locating lexical gaps in English by concentrating on the semantic structure of its vocabulary. To postulate a gap, we must concentrate on a particular point in a given structure and evaluate the possibility of a vacant slot in it. This part is concerned with the 'prototypical gaps' we discussed above. The second part of our research will focus on the comparison of two languages (English and Czech) in order to locate a possible missing translation equivalent in one of them. In this part we will use a bilingual dictionary to help us with the search for gaps. This search is based on the study of Bentivogli and Pianta and reveals a kind of gap which we relate to 'functional gaps' discussed by Lehrer rather than to 'prototypical gaps', but for the purpose of our study we consider this gap equal to 'prototypical gap'. The third part of the search will consider the possible areas of Czech vocabulary that are affected by 'lexical blanks', a term which we introduced as a working term for our research. lexical blanks are filled by borrowings from English in our case. We think that their discussion is relevant for our study, because they also refer to an empty space not covered by the language, they probably use similar means to fill these spaces and lastly they provide us with information on the fields which they occupy which can be further studied in order to see whether they are wholly assimilated

or partly shared by the two languages. We will use *Slovník neologizmů v češtině* written by Martincová et al. in order to show how the Czech language community deals with lexical blanks.

In the conclusion, this paper will also little evaluate the practical consequences of lexical gaps/blanks and will contemplate the problems that gaps/blanks are posing to the communication. On the one hand the previous work on gaps we surveyed establishes a common ground for our present analysis, on the other hand we saw that the research of gaps is not unified and simple. The research is largely based on the findings of the works cited in the theoretical part of this paper and uses them as a starting point for the analysis. We assume that a vacancy in the lexicon can arise for various historical, cultural, linguistic reasons or combination of all these and we evaluate this assumption further in the study. A crucial issue on which our whole study revolves is the term 'lexical gap'. On the basis of the literature on the topic of lexical gaps, we suggest that we deal with a 'prototypical gap' (e.g. Lehrer's matrix gap) and a 'lexical blank' in our study.

The major challenge in all parts of our study was the collection of data. First, in order to survey the selected lexical structures in English, lexical fields, we considered several sets of words that were randomly chosen and investigated. The examples we chose are not necessarily the best for illustrating the phenomenon of lexical gaps. The attempt was to analyze the English lexicon and to show that it is possible to find missing lexicalizations, gaps, for certain concepts in a random sample of English vocabulary. The limiting factor was the size of the dictionary used for the study and also the fact that English is not the author's native language, which means that he possesses only limited knowledge of some of the cultural or social information needed for assessing the contexts in the study. In order to be able to find gaps two dictionaries were used: the bilingual Czech-English Lingea Lexicon 5 (LL5), and the monolingual English dictionary Cambridge Advanced Learner's Dictionary (CALD). We considered only the British variety of English.

In the first, single-language stage of the research, we concentrated on two verbs and their semantic fields, and analyzed all terms synonymous with them. We had to establish central

and marginal features that are characteristic for the members of the fields in order to find a possible missing element in the structure of the fields. We followed mainly Lehrer's study of matrix gaps in this part of the study, but also considered her study of a functional gap. Next, we took so called proportional series (Fischer 1998) or grids (Cruse 2004) and studied their structural components. Examples c, d, e analyze the fields of animal species, family relationships and garden tools. We organized individual terms in grids and looked for empty slots in the grid structure based on the proportionality of the terms in the series. We realized that the main problem is not just finding a possible gap, but the assessment of its relevance in the cultural and psychological context of the given language community.

The bilingual part of the research was concerned with manual search of the dictionaries used for our study. We chose random letter from the English alphabet and followed Bentivogli and Pianta's (2000) method of singling out possible lexical gaps. The method studies the vocabulary of two languages and on the basis of their translation equivalence decides whether the languages have or do not have the same lexical means for expressing corresponding concepts. Their method considers only single item lexical entries in the source language, in our case English, and their TEs. The TEs must be free combinations of words in order to be considered suitable for further search for possible lexical gaps. The method of finding gaps in Italian described earlier by Bentivogli and Pianta helped us to organize our search for gaps in Czech. We used a bilingual dictionary and studied the SL and the TL part of the entries in order to find lexical gaps. Our procedure was a simplified version of Bentivogli and Pianta's method, because the software they used was not available. Nevertheless we randomly chose letters or their combinations in LL5 and searched for TEs. We limited the search to the first 200 entries in each case. First we rejected the multi-word expressions in the SL, after we focused on the single word units in the SL and looked at their TEs. We followed Bentivogli and Pianta's example and excluded all TGRs (translation groups) with a simple word. We also excluded all the multi-world expressions that we assumed to

be a set combination of words (idioms, etc.). This part was the hardest part of the procedure and we illustrate the decision-making process in the study. Finally we manually checked all the TEs that contained free combinations of words in order to decide whether these are lexical gaps or not.

Our examples f, g, h illustrate this method and work with the series of dictionary entries in English starting with k, ki, l. First we took 200 entries into consideration in each series and analyzed the SL and TL corresponding items. After singling out all the TEs comprised of more than one lexical item, we had to decide whether TEs in the TL (Czech) are free combinations of words or not. After considering the nature of the word combinations we organized the terms into charts and analyzed corresponding fields in the chart. Empty slots were marked with question marks to signal the possibility of a lexical gap. When the charts were completed we discussed the results and their possible relevance. In the next step of evaluation we used English dictionary entries which consist of generic terms, examples j and i. We searched for words containing the root */man/* and applied a similar method as in the search of random series. Subsequently, we used the data from this last search and looked into them in order to find discrepancies in terms referring to male and female gender. We organized a chart and filled the data into it. The corresponding fields with empty slots were marked and later evaluated.

Lastly we took a Czech dictionary of neologisms and chose all entries beginning with the letter 'm'. We singled out entries marked as words of English origin and we noted all their features and put them into a chart. On the basis of these charts, we evaluated the means of filling lexical blanks in Czech that are presumably revealed in the dictionary and the domains which are affected most by the lack of lexical items.

4. Research

4.1. Analysis of possible gaps in lexical fields

Example a: *to jump*

To find a lexical gap in a lexical field may seem a simple procedure knowing the facts we mentioned before, but the real problem of finding a gap is not to suggest the possibility of its existence, but to justify its existence. We recall all the constraints on gaps by Lehrer here. Therefore, in our paper, we only point out the possible occurrence of a gap in the structures, we discuss its credibility to some extent, but do not provide a complete set of arguments to justify it. We think it would be impossible considering that even the theoretical work on gaps we summarized before is not unified and convincing. We saw that gaps can be found in fields of different types. Let us take our first example, a field type which Cruse calls a cluster. Our central element is the verb *jump*, a stylistically unmarked element, and the other members of the field are as follows: *bounce*, *bound*, *hop*, *leap*, *skip*, *spring*, *caper*, *prance*, *clear*, *hurdle*, *vault*, *buck*, *lope*, *cavort*, *dive*, *parachute*, *saltate*.

Each of the members adds a certain quality to the basic sense of the central element. The synonym set of the verb *jump* and of the other fields in our research were established by considering all synonymous relations in LL5 (Lingea Lexicon 5), CALD (Cambridge Advanced Learners Dictionary) and the synsets in WordNet 1.7.1 Princeton. In order to propose a gap Lehrer (1974:104) claims that ‘there must be at least one member in each row or column of the matrix of parameters’, provided that we bear in mind other restrictions too. This means that we have to propose parameters that are valid for at least one member from the field and then check the field for a possible member which does not comply with one or more parameters or we have to propose

parameters and check whether there is an empty slot in the chart where the parameter axes intersect. Thus the first task is to assign parameters which would help us to demonstrate a gap and organize the matrix of the verb field *jump*. The potential gaps arising from such search would be a rather hypothetical phenomenon, because the parameters do not consist of closed sets as Lehrer implies and so it is not possible to calculate the exact number of possible combinations. Also our cultural and linguistic knowledge is limited, thus a gap proposed by our research may be rejected or seem unlikely from a native speaker's view.

Table 1: The jumping matrix

| reason for jumping | using a tool | without a tool |
|------------------------------|--------------|----------------|
| in order to go over sth. | skip | hurdle |
| in order to get somewhere | parachute | leap dive |
| in order to express feelings | ? | caper |

In Table 1, we suggested the possibility of using a certain tool and without it and put these parameters on the vertical axis, on the horizontal axis we have reasons for jumping like *to jump in order to go over sth.*, *to get somewhere* and *to express feelings*. Lehrer says that the set of parameters for a semantic field can be enormous if all the possibilities are considered. We could, for example, add to the parameters above those dealing with the manner of the jump and take the verb *saltate* or *buck* in consideration. Then we could get combinations of parameters like: *jump in order to get somewhere and performing a particular figure during the jump*, or *jump in order to express feelings and consider the type of agent* (animal, human). We decided that for the purpose of our analysis it seems sufficient to list only some in order to show a possible gap. The question mark in Table 1 shows the place of a possible gap in the field structure. We have to consider Lehrer's constraints on gaps and contemplate the combination: *jump using a tool and express feelings*. Exactly this combination returned an empty result slot and suggested a gap. We can propose that it is grammatically correct to say: *to jump and hold/use a tool and express feelings at the same time*

which will eliminate the constraint on impossible lexical concepts. Jumping in order to express feelings seems rather common with regard to verbs like *caper* given the definition in CALD: ‘*caper - to run and jump about in an energetic, happy way*’. The biggest obstacle seems the question whether one can jump, express feelings and use a tool at the same time and to comply with the second constraint on nonexistent objects or situations. Lehrer (1974:104) says that ‘this constraint is rather too strong as it stands, for we can use language to speak about fictional worlds’ and she suggests making this constraint relative to a possible world of things and facts. Bearing this in mind, we have to think of a concept (situation) for our combination of parameters in question to be able to justify the gap. We can propose that one can jump and express feelings on a trampoline for example or one can use a device like a baby bouncer, or some kind of a tool to help him/her jump. All these suggestions are feasible, but we must consider the feelings parameter. Baby can bounce in a baby bouncer and express his/her feelings; we may further question whether the feelings are caused by the bouncing or whether the baby bounces first and then is happy or other. We can conclude that the gap is justified in a way, because the verb *bounce* does not say anything about the feelings of the person performing the bouncing. We can discuss the necessity of such term. Fischer speaks of psychological salience in order to show that some terms are redundant and therefore there are gaps in vocabularies. The activity without a lexical realization is usually marginal with regard to the central meaning of the field or concept. We may discuss the potential need for such term in a certain periods in history, e.g. baby booms, but this would be another study.

Table 2: The jumping matrix

| direction | and move towards a place/animate agent | and come back on the same spot / animate agent |
|-----------|--|--|
| over sth. | hurdle | skip |
| upwards | spring | bounce* |
| downwards | parachute | bounce? |

Before discussing the gap proposed in Table 2, we stress again that the amount of possible gaps that can be found using the parameters method in a matrix is extensive. It is the psychological salience together with other factors that make us think of the usefulness of the terms proposed to fill the gaps. As there is usually no need to have terms for some objects or situations in spite of the fact that they are feasible, gaps can be only a hypothetical phenomenon.

The gap suggested in Table 2 *bounce?/** can seem even less plausible than the example before. We proposed combinations of parameters as seen in Lehrer (1974: 100) that consist of more than one parameter defining one criterion. This is illustrated in the vertical axis by combinations: *move towards a place / animate agent* or *come on the same spot/ animate agent*. The range of possible answers is narrowed by this constraint and we get *bounce** with asterisk, because we have certain doubts, as we feel that to bounce one must first perform the initial movement and then to bounce from a surface back. Thus the concept of moving upwards first and then coming back is in our view not covered by the verb *bounce* well. The meaning of bouncing is rather unclear considering this proposition and it is more complex and pragmatic question to be contemplated than it is the space in this study. The verb *bounce* is at least in one case either * or ? a gap considering the opposite parameters upwards/downwards. We propose that to bounce does not express both: the concept of jumping down and coming back to the same spot or vice versa. To consider the gap from Lehrer's perspective of functionality, we conclude that the example of a gap in the concept of jumping downwards and coming back on the same spot will be more salient than the other because an observer of the situation will not find words to describe what he/she sees more likely in that situation. (Consider jumping on a trampoline or to dive)

Example b: *to throw*

Table 3: The matrix of throw

| | | |
|----------------------------------|-------------|--------------|
| throw | taking aim | aimlessly |
| once | stone/pitch | toss/chuck |
| repetitive attempts | pelt | ? |
| a certain object | stone/pitch | throw? |
| human body without any device | ? | defenestrate |

Similarly to the jumping field, we contemplate the field / matrix of throwing. We propose some parameters and consider the feasibility of the suggested concepts. The first look at the matrix in Table 3 and we see that there are 3 potential gaps. This field consisted of following words gathered according the same rules as the jumping field: *throw, fling, cast, hurl, overthrow, pelt, pitch, shy, stone, chuck, toss, unseat*. The combinations of parameters possible for consideration was even greater than in the jumping field and thus suggesting even greater number of possible gaps. We could for example consider the meaning of *shy* in CALD: *shy - to throw something suddenly, often in a sideways movement*, But we contemplated only few words and their components and retrieved the data in Table 2. The gap proposed for the parameters set *to throw repeatedly without taking aim* is a quite credible example. This is because the concept of the situation is highly possible unlike the proposed gaps for the other concepts in the matrix. We think that it is not conceivable or rather inappropriate to thing of a human body being thrown at all. This is also in the view of Lehrer's constraint on components, Lehrer (1974:105) speaks about the relevant components to postulating gaps. She says that the components found in peripheral words of the lexical field are not to be relevant to postulating gaps. The components proposed should be from the central words of the field exclusively. Are the words and their components we used for the previous analysis central or peripheral? The answer is rather against our conclusion and thus, according to Lehrer, there is probably no gap in the previous example.

Example c: animal species

Next we look at the proportional series suggested by Fischer (1998) and evaluated by Lehrer (1974). Lehrer (1974: 98) calls gaps found in these structures matrix gaps, therefore we assume that the structures are called matrixes according to her. Proportional series can be very fruitful in finding gaps. The series we proposed concerned animal species. We included domestic and wild animals in order to make the analysis more illustrative. The number of pairs in the proportion is given by the number of species we surveyed, but it can be further extended to include all the animal species we know. For the purpose of our analysis, it is sufficient to present only some of the possible constituents. The series is presented in Table 4.

Table 4: The grid of animal species

| adult animal (generic) | offspring | the act of breeding (verb) | the place of breeding |
|-------------------------------|------------------|-----------------------------------|------------------------------|
| pig | piglet/shoat | farrow | farrowing house?/ pig farm |
| hen | chick | hatch? | hennery |
| dog | puppy | breed? | kennel |
| cat | kitten | breed? | ? |
| duck | duckling | hatch? | ? |
| cow? | calf | breed? | byre?/calf shed |
| horse | foal | foal | stable/stud farm |
| goose | gosling | hatch? | ? |
| rabbit | ? | breed? | hutch |
| lion | lion cub | cub? | lion's den? |
| bear | bear cub | cub? | bearpit (in zoo)? |
| elephant | elephant calf | breed | ? |
| mouse | ? | breed | ? |

The series follows Lehrer's discussion of animal terms for male, female and young members of species. She discusses for example: species = *horse*, male = *stallion*, female = *mare* and young =

foal. We discuss the species in terms of their place of breeding or the term designating the act of breeding. First let us consider the generic term column. We see that this is quite complete and only the term *cow* is with question mark. This is because Lehrer suggests that *cow* is not a generic term for the group, but often fills the gap. She says that sometimes the term *cattle* is used but this is insufficient for her, because there is no singular for *cattle*. She also discusses the missing terms for male, female and young *mouse*. We found also the missing term for *young rabbit* but as Lehrer says this series is as long as the number of species on the planet and reveals enormous number of gaps. We follow the search in this area and find that there are verbs *farrow* (to produce a litter of pigs) in LL5, not found in CALD and *foal* (to give birth to a foal) in LL5 and CALD. These terms describe the birth giving to specific species, the former to pigs and the latter to horses. There are no matching terms for other animals in the series. These gaps are usually filled with more generic terms used for more animals, e.g. for *lions*, *wolfs* and *foxes* we use *to cub* and for other species we use the most common generic term *to breed*. This is in Cruse's view (2004: 178) autotaxonomy: ‘a possible gap or its space in the lexical field can be filled by extension of the sense of an item immediately above, i.e. its superordinate. ‘ The *breed* autotaxonomy is illustrated on the term dog, *breed* is used to fill the gap:

| | | | |
|-----------------|-----------------|-----------|-----------|
| | | reproduce | |
| | breed | | procreate |
| farrow (pig) | foal (horse) | ? | (dog) |

The same procedure fills the gaps in the offspring column. Thus we get *lion cub*, *bear cub* as *cub* is a young for any carnivore species. More examples of autotaxonomy in this series are: *elephant calf*, *young/baby gorille*, *young/baby kangaroo*, *young/baby giraffe*.

Next we search for the term of the breeding place and the results reveal several gaps again. The procedure which fills the gaps if at all is autotaxonomy. We put question marks next to a

few terms to suggest a problem or not a definite gap. *Farrowing house* appears to be a free combination of words in CALD, but a fixed combination in LL5, next the term *byre* is described as archaic and the term *cow shed* is rather generic, further the term *lion's den* appears to have more figurative than denotative meaning and last the term *bearpit* does not appear in CALD and it describes only bear dwellings in zoo according to LL5 thus excluding wild bears. Furthermore, if we consider the reasons for the occurrence of the gaps in this series, we suggest that most of the gaps in this field are due to psychological salience. Fischer explains that the closer the relationship with the object (in our case animal) with humans the less likely there is to be a gap. This applies to some cases, but excludes for example *cat* which is usually very close to humans, but the term for its breeding place is missing. We could find more pragmatic explanation for this, but our major aim is to locate gaps in this paper, therefore we leave this for future study. The gaps suggested in this series are filled by generic terms.

Example d: family relationships

Table 5: The grid of family relationships

| member | behave like (verb) | the state of being (noun) | suggestive of ... |
|---------------|---------------------------|----------------------------------|--------------------------|
| mother | mother | motherhood | motherlike/-ly |
| father | father? | Fatherhood | fatherlike/-ly |
| brother | ? | brotherhood? | brotherlike/-ly |
| sister | ? | sisterhood | sisterlike/-ly |
| grandfather | ? | ? | ? |
| grandmother | ? | ? | ? |
| aunt | ? | ? | ? |
| uncle | ? | ? | ? |

The meaning proposed by the verb *to mother* (to treat a person with great kindness and affection and to try to protect them from anything dangerous or difficult) can supply the one necessary element in the chart to conclude for us that there are several possible gaps in this structure. The

second term in this column *to father* can be rather difficult, because its meaning is (to become the father of a child by making a woman pregnant), we can assume that this does not stand in opposition to the meaning of *to mother* in the definition above, because *to mother* have one more meaning (to make children) which would be the opposite of *to father*. Someone can suggest that *to father* expresses both meanings as *to mother* does and thus filling the suggested specification gap by more generic term , but we did not find other meanings in the dictionary, thus we can consider this lack of meaning in the verb *to father* a gap.

The gaps suggested in the column ‘the state of being (noun)’ are hard to fill with a simple lexical item. There is no such term as grandfatherhood, but the explanation for this is difficult. We feel that the state of being grandfather/grandmother/uncle/aunt (we can extend the range by all kinship terms) is of the same importance for those involved as is fatherhood, brotherhood, sisterhood, but the term for them is missing. We see that the psychological aspect can be an explanation in most cases of gaps, but it is rather questionable here. We even do not see any attempts to fill the gaps to lexicalize them, except a few usages in media. (Milligan, M. ‘*Grandpa Rules: Notes on Grandfatherhood, The World's Best Job*’. Skyhorse publishing, 2008.)

So far we have ignored the possibility of comparing the two languages we study. We found gaps in English without the help of Czech. This was in order to prove the possibility of finding gaps in a language independently of another language using the structural hypothesis. If we consider the series above in Czech we arrive at the conclusion that Czech has gaps for the verbs *mother* and *father* (if we exclude the colloquial language: *fotrovat*) Similarly to English, Czech lacks lexical terms for *grandfatherhood/grandmotherhood/unclehood/aunthood*. (not to consider colloquial speech again: *dědkovatět*, *babkovatět*, *střežkovat* that usually have pejorative connotations). To see that the languages are even more different, we consider the terms in the last column and find out that Czech has no single terms for *motherlike/fatherlike/sisterlike/brotherlike* that are lexicalized in LL5. Czech has to use periphrastic constructions to define these concepts:

chovat se jako matka/otec/bratr/sestra. We can assume the terms *mateřsky*, *otcovsky*, *sestersky*, *bratrsky* to be the TEs of these terms, but they rather seem to be in correspondence to *motherly*, *fatherly*, *sisterly*, *brotherly*. To conclude the evaluation of this field, we say that there are several gaps in both languages, but the number of gaps in Czech is higher. This can possibly be explained by the lack of corresponding derivative processes in Czech as compared with English *–like* and *–ly* and the productivity of noun to verb conversion⁵ in English *a mother-to mother*, in opposition to Czech verb from noun derivation using affixation.

Example e: garden tools

Table 6: The grid of garden tools

| Tool | Using the tool (verb) |
|------------------------------|----------------------------------|
| shovel | shovel |
| <i>lopata</i> | <i>?házet / pracovat lopatou</i> |
| rake | rake |
| <i>hrábě</i> | <i>hrabat</i> |
| spade | spade |
| <i>rýč</i> | <i>rýt</i> |
| pitchfork | pitchfork |
| <i>vidle</i> | <i>?házet/podávat vidlemi</i> |
| pickaxe | pickaxe |
| <i>krumpáč</i> | <i>?kopat krumpáčem</i> |
| hoe | hoe |
| <i>motyčka</i> | <i>?okopávat (motykou)</i> |
| wheelbarrow | wheelbarrow |
| <i>kolečko</i> | <i>?vozit na kolečku</i> |
| scythe | scythe |
| <i>kosa</i> | <i>kosit</i> |
| sickle | to sickle |
| <i>srp</i> | <i>?sekat srpem</i> |
| ?trowel | to trowel |
| <i>lopatka (zahradnická)</i> | <i>?</i> |
| sprinkler | water |
| <i>postřikovač</i> | <i>pokropit,, zalévat</i> |

⁵ By conversion we mean deriving new words without any overt marking

The lexical field above is interesting for our study, because most terms from the right column are not found in CALD, but most of them are in LL5. If this is due to the fact that CALD's version we use is older than the version of LL5 then we can see the procedure of filling gaps in progress. We rather assume that such terms as *to spade*, *to pitchfork*, *to pickaxe*, *to wheelbarrow* and *to hoe* are historically well established to be modern, because the activities they describe do not belong to modern technical procedures. We check the use of those terms in BNC and see that only the nominal counterparts are listed there with following frequency: *pitchfork* 48, *pickaxe* 22, *wheelbarrow* 212, *trowel* 112. We find only 2 examples of the verb *hoe*. This evidence can support the fact that the terms for verbs in the right column are rather new and not assimilated into the vocabulary yet, but we test it in the online dictionary of etymology and find *to pitchfork* attested in 18th century and conclude that further search in more advanced dictionaries will reveal the other verbs early existence too.

The series above is interesting for one more thing. The count of possible gaps in English here is 2, but the count for the possible gaps in Czech is considerably higher. It is the first time we properly compare the languages and use this comparison as a tool for discovering more gaps. One possible gap in the left column is *zahradnická lopatka* whereas there are 6 possible gaps on the right. We follow Bentivogli and Pianta's (2000) claim that to consider a translation equivalent to be a gap, it must be a free combination of words. The following data comply with the rule and therefore can be called lexical gaps in our view: *házet lopatou*, *podávat vidlemi*, *sekat srpem*, *kopat krumpáčem*, *vozit na kolečku*. The reason for Czech having more gaps in this field than English can be that gardening is more popular in England than in Czech or more discussed among language users. Fischer (1998) considers perceptual and psychological salience to explain gaps in English. Our explanation of the gaps among garden tools is very simple, but we use the psychological and perceptual aspects for consideration of gaps as Fischer. Furthermore, we may say

that conversion of nouns into verbs is not a common word formation process in Czech and this is the constraint for filling the gaps with lexical items.

To continue with lexical field analysis we can consider numerous examples like the field of colours, shapes, etc. Why is there *whiten, blacken, redden*, etc. but not *blue/bluen* and many other nouns referring to colours that do not convert to verbs? Why are there verbs *to square, to circle* but not *to triangle*? As we see there are multiple possibilities in searching for gaps in lexical fields. The fields we discussed above should be sufficient examples of this. Next, we use the comparative method to identify possible gaps in Czech or English. We work with a dictionary, in our case LL5, CALD and see whether this method brings any satisfactory results.

4.2. Comparative search in dictionaries

Example f: letter k entries

Table 7 below is a summary of the results for searching in LL5 for TEs for words beginning with the letter *k*. We divide the results and for the sake of simplicity narrowed the number to 200 SL entries starting with the letter *k*, our SL (source language) is English.

Table 7: Letter k entries

| <i>k</i> 200 | Multi-word expression | Single word expression | All TGR (senses) | Single-word TGR | Multi-word TGR | Set combinations | Possible gaps |
|--------------|-----------------------|------------------------|------------------|-----------------|----------------|------------------|---------------|
| English | 44 | 156 | | | | | |
| Czech | | | 197 | 131 | 66 | 57 | 9 |

We retrieve 44 multi-word expressions out of the 200 studied samples. These we exclude and look at the single-expressions and their TEs. The 156 words in SL have 197 corresponding senses in TL (target language). This is because some of the SL entries are polysemous and there are more than

one corresponding senses for some forms. For example *kayak* is noun and verb form at the same time. This fact appears to be the source of gaps in the course of our study.

Consequently, we have to decide whether the TL combinations of words are free or fixed. We have 66 multi-word expressions. It is very easy to decide in some cases, but others are quite difficult. We exclude combinations like *kaleyard – zeleninová zahrádka*, because it appears to be Scottish English. We exclude *kedgeree – dušená ryba s rýží a vejcem natvrdo*, because it is rather specific cultural concept which is hard to justify in Czech context and thus hard to be considered a gap. For the same reason we exclude *Kauri – damaroň australská (strom)*, that is culturally specific and not necessary to appear in Czech vocabulary. We exclude *karyosome – buněčné jádro*, although we do not find it in Czech monolingual dictionary, we find it as a set combination of words on the internet and finally, we exclude *kelt – losos po tření* that is very technical term. We follow this procedure of assuming and checking the word combinations and decide whether to include them in further study or not. We encounter many difficult issues like *keepsake – dárek na památku / památka?/*, these confirm the complexity of the decision making in our study, because it is difficult to draw a clear line between a fixed combination of words and a free combination of words in some cases. After considering all possibilities we arrive at the conclusion, which is that there are 9 possible gaps in this sample group of words, 4.4% of all terms in example f. These are:

1) *to kayak – jezdit v kajaku* 2) *karting - ježdění na motokárách* 3) *to keynote / nastítnit v hlavních rysech* 4) *keyboardist - hráč na klávesy, hov. klávesák?* 5) *keyboarding – zadávání dat přes klávesnici, psaní přes klávesnici* 6) *to keyboard – napsat/vložit něco přes klávesnici* 7) *to kennel – chovat v boudě/kotci* 8) *to keelhaul – protáhnout koho pod kýlem (za trest)* 9) *to kedge – přitahovat loď pomocí lana na kotvě.*

Bentivogli and Pianta (2000) did not evaluate such gaps, i.e. they did not list the resulting gaps from their search, consequently, we do not have a comparable database of gaps that can be used in order

to see whether Czech and Italian gaps are of similar nature and whether we follow the right direction in our research. The gaps in our first search are 3 nouns and 6 verbs. If we consider the verbs we can say that all are converted nouns except *to keelhaul*. This result is similar to the result we get in our example of gardening tools (see Table 6) where most of the gaps are of similar origin, i.e. Czech has no equivalents for English verbs that are results of noun to verb conversion.

To consider all gaps in this example and the area of their use, we see that most of them are words related to technical activities. The verb *to keelhaul* is one example which is hard to decide on and we include it here, because we are unable to tell whether it can be still used today or whether it is outdated. It is attested in the 1660's according to its etymology, but the dictionary does not say whether this type of punishment has been abandoned or whether the term is still used figuratively in some areas. The verb can refer to a habit still applicable in the army or sport with less harsh consequences, thus we include it here. Also to say whether *keyboardist* is or is not a gap is difficult, but we regard its TE *klávesák* as colloquial and it is not in the Czech LL5 as an independent entry, therefore we consider it a gap. The other words are mostly from the IT domain (items 5,6), sport (items 1,2,9?), animals breeding (item 7), music (item 4), other (items 3,8).

Example g: ki - initial entries

Table 8: ki - initial entries

| ki 200 | Multi-word expression | Single word expression | All TGR (senses) | Single-word TGR | Multi-word TGR | Set combinations | Possible gaps |
|---------|-----------------------|------------------------|------------------|-----------------|----------------|------------------|---------------|
| English | 34 | 166 | | | | | |
| Czech | | | 180 | 129 | 51 | 44 | 7 |

The results in our second sample of comparative dictionary search are presented in Table 8. We take lexical items starting with *ki* and search the dictionary for English entries. We take the first 200

results and separate the single word expressions and follow the same procedure as in example 1f. At the end we get 7 possible lexical gaps, 3.5% of all terms in example g. The number of gaps in this and the previous search is similar. Also the type of results uncovered by the search is very much like in the first sample, i.e. example g (nouns and verbs). We suggest the following gaps: 1) *kick* – *přechodný zápal/nadšení pro něco* 2) *to kiln* – *sušit v peci/sušárně* 3) *kindling* – *třísky na podpal* 4) *to king* – *dosadit na trůn, učinit králem* 5) *kingpin* – *hlavní /klíčová osoba* 6) *to kipper* – *nasolovat a udit ryby* 7) *to kiss* – *zlehka se dotknout*

As we can see from the list above there are 4 verbs and 3 nouns. Most of the verbs (items 2,4,6) are converted nouns, whereas *to kiss* is a metaphoric transfer of sense. The gaps are from different domains than those in the example f. They are from politics (items 4, 6, 5?); technology (item 2); other (items 1,3,6,7). We again have problems to classify many word formations and decide whether they are free or fixed. We have *kingship* – *úřad/hodnost krále*, but the Czech TE is rather ambiguous. The possible translation is *koruna* but it is not in our dictionaries and thus we exclude it together with many similar combinations intuitively. We can also exclude *to king* as this can be Czech *korunovat*, but the English term has a different sense and *korunovat* can be translated as *to crown*, thus we consider the term a gap. We also encounter abbreviations in the SL, e.g. *KIA* (*killed in action*) – *zabít v boji (mil)*, but it is difficult to say whether we deal with one word or a multi-word phrase. Of course *KIA* is an alphabetism, but it is not certain whether speakers perceive it as one word or a combination of words. This question is interesting, but we leave it for another study. We propose not to include *KIA* as a gap. Similarly we exclude all abbreviations from our study as we think that they are only more efficient and modern form of saying a multi-word expression and thus must be excluded from this paper.

Example h: letter l entries

Table 9: Letter l entries

| 1 - 200 | Multi-word expression | Single word expression | All TGR (senses) | Single-word TGR | Multi-word TGR | Set combinations | Possible gaps |
|---------|-----------------------|------------------------|------------------|-----------------|----------------|------------------|---------------|
| English | 55 | 145 | | | | | |
| Czech | | | 176 | 132 | 44 | 35 | 9 |

Table 9 illustrates the results of search among lexical units starting with *l**. We retrieve 145 simple word expressions out of 200 entries in SL (English) and their 176 senses in TL (Czech). After rejecting the single-word translations and set combinations of words, we get 9 possible gaps, 4.5 % of all entries. The possible gaps are below:

- 1) *laager* - *tábor chráněný/obehnaný vozy* 2) *to labour* - *být mylně přesvědčen, být obětí*
3) *lactiferous* - *vyměšující mléko* 4) *to ladder* - *pustit oko, udělat si oko* 5) *to lag* - *tepelně odizolovat*
6) *to lair* - *zalézt do brlohu, doupěte* 7) *to lead* - *zalít olovem* 8) *to leaflet* - *doručovat, rozdávat letáky* 9) *to leather* - *potáhnout kůží*

All these possible gaps can be questioned from different points of view. We also have doubts about some of them, for example *to lag* that can be translated as *odizolovat*, but we can see that the entry *to lag* has more to its meaning than the more general Czech or English *insulate*. We can test *zateplit*, but it has its own translation *to weatherize* and can mean something completely different. The entry is ambiguous and it is a good example of problems we have had during the study of gaps. Some technical terms are possibly omitted from one language version of the dictionary and the following crosscheck in other sources does not return satisfactory results. Similarly we check for *to lair*, but find that the TE *upelešit se* is an inappropriate equivalent for some speakers. We organize the gaps from example h in domains as follows: military (item 1); biology (items 3, 6); technology (items 4, 5, 7, 8); other (item 2). And we also see that the suggested gaps are noun (1), verbs (7) and an adjective (1) this time. Interestingly, we can see a (possible) pattern emerging in verbs retrieved

by our search: most of the verbs in example h are converted nouns again as in example f and example g. This will be discussed in the summary.

Example i: man entries

Table 10: man entries

| man 200 | Multi-word expression | Single word expression | All TGR (senses) | Single-word TGR | Multi-word TGR | Set combinations | Possible gaps |
|----------------|------------------------------|-------------------------------|-------------------------|------------------------|-----------------------|-------------------------|----------------------|
| English | 99 | 101 | | | | | |
| Czech | | | 149 | 103 | 46 | 30 | 16 |

The use of generic terms in English dictionary search has proved to be rewarding. We assume that not all the SL lexical entries containing –man will have one to one TE in Czech. This is illustrated in Table 10. We can see that there are 16 possible lexical gaps in Czech compared with English, 8 % of all entries in example i. The biggest problem in this example is the derivational process of compounding which is highly productive in English, but not as productive in Czech. Therefore, the Czech TEs of English compounds seem to be free combinations of words in most cases, but they are regarded as set combinations in the dictionary. We crosschecked our results and suggest only those TEs that are not listed as independent entries in the Czech dictionary. We end up with possible lexical gaps listed below:

- 1) *bushman* – *obyvatel australské buše* 2) *balletomania* - *nadšení pro balet* 3) *brinkmanship* - *balancování na hraně* 4) *bandsman* - *člen (dechového) orchestru* 5) *calamander* - *dřevo ze stromu tomel* 6) *churhwoman* – *žena chodící do kostela* 7) *commando* – *přepadový oddíl* 8) *crewman* – *člen posádky* 9) *dalesman* – *muž z údolí* 10) *gamesmanship* – *neférové jednání* 11) *gerrymander* – *účelově rozdělit volební okrsky* 12) *gerrymandering* – *manipulování s hranicemi obvodu* 13) *gunman* – *ozbrojený muž* 14) *hangman* – *kat co věší* 15) *horseman* – *jezdec na koni (hlavně zdatný)* 16) *knifeman* – *násilník s nožem, muž ozbrojený nožem*

As we can see again, many of the possible gaps can be questioned on the grounds of their semantics. For example, we can suggest that 1) *bushman* can be translated with more general *zálesák*, but we find *woodsman*, *backwoodsman* for Czech *zálesák*, therefore we include this more specific term among our gaps. Similarly, 14) *hangman* is more specific than *headsman* – *popravčí* and is included as a gap. Both these entries are examples of how Czech fills the gap, Czech speakers will probably use the more general terms, i.e. *zálesák* and *kat* in order to cope with the lexical vacancy in Czech vocabulary. See also *horseman*, *knifeman*. Cruse (2004) calls this phenomenon autotaxonomy. An opposite approach is to *bandsman* – *hráč (člen) v orchestru (na dechový nástroj)* in Czech. We refer to individual members of a band according to the instrument they play, i.e. *flétnista*, *trumpetista*, etc., rather than use the generic *hudebník* or colloquial term *muzikant*, that do not imply the use of brass instruments, which is suggested by the English term. The word *calamander* is included, because its TE complies with the conditions according to Bentivogli and Pianta and there are comparable pairs in Czech where the generic term refers to material and a tree at the same time, e.g. *smrk* - 1.strom 2. smrkové dřevo. The word *calamander* expresses material, but the term for the tree is *tomel*. We must stress again the complexity of some meanings and their technical nature. The use of more sophisticated tools, dictionaries can reveal different facts and disprove our results. We can also object that the translation *balancování na hraně* is a set expression, but there is only *chodit po tenkém ledu* in the Czech dictionary, which has translation - *walk on the thin ice*, thus we add *brinkmanship* to lexical gaps. We follow the method of Bentivogli and Pianta and compare the terms from that view in order to localize the gaps. We think that more precise measures will rule out many of the gaps proposed by our research. Very interesting are terms in 11) and 12) which are from politics and used in relation to the *first past the post* system of elections, thus conditioned culturally and socially, i.e. these terms seem to be irrelevant in societies without this political system. We include 11) and 12), because we think that they are important

cross-cultural references and in the situation today, the probability of the terms being used in Czech media or Czech political environment can not be disregarded.

Example j: man vs. woman entries

Next, we consider the gender role and its reflection in the vocabulary of the two languages we study. We take dictionary entries with the root *man* again, but this time we compare the results in both languages and single out those English words that do not differentiate between male and female roles, where Czech words do. We also note the missing Czech TE of English entries. We believe this search to be appropriate, because English operates with some terms that distinguish gender, e.g. *chairman/chairwoman* - *předseda/předsedkyně*, but omit it in others. In order to find the male counterparts we searched the dictionary for entries containing *–man* in English and retrieve following results which we test in the dictionary and select only those without female counterparts in English or those that do not have a TE in Czech.

Table 11: Man vs. woman

| English male | English female | Czech male | Czech female |
|--------------|----------------|--------------------------|-----------------|
| adman | ? | ? zaměstnanec rekl. ag. | ?zaměstnankyně |
| almsman | ? | žebřák | žebračka |
| ambulanceman | ? | sanitář | ?sanitářka |
| cattleman | ? | chovatel dobytka, rančer | rančerka |
| cleaner | charwoman | uklízeč | uklízečka |
| clergyman | ? | kněz | ? |
| coachman | ? | kočí | kočí |
| committeeman | committeewoman | ?člen výboru | ?členka výboru |
| cowman | ? | honák | ?honačka |
| cracksman | ? | kašár | kašárka |
| cragman | ? | skálolovec | ? |
| crewman | ? | ?člen posádky | ?členka posádky |
| dairyman | ? | mlékař | mlékařka |
| dalesman | ? | ?muž z údolí | ?žena z údolí |
| doorman | ? | vrátný | vrátná |
| draughtsman | ? | technický kreslíč | tech. kreslička |
| dustman | ? | popelář | ? popelářka |
| exciseman | ? | berní úředník | berní úřednice |
| fieldsman | ? | polař (v kriketu) | polařka |

| | | | |
|--------------|---|-------------------------|-----------------|
| fireman | ? | hasič | ?hasička |
| fisherman | ? | rybář | rybářka |
| flyman | ? | kulisák | kulisačka |
| foeman | ? | nepřítel | nepřítelkyně |
| foreman | ? | mistr, předák | mistrová |
| freshman | ? | ?student 1.ročníku uni. | ?studentka |
| frogman | ? | žabí muž | ? |
| fronteersman | ? | hraničář | ?hraničářka |
| funnyman | ? | ?komik profesionál | komička |
| groundsman | ? | ?správce stadionu atd. | ?správcová st. |
| gunman | ? | ?muž s pistolí, | ?žena s pistolí |
| hangman | ? | ?kat (co věší) | ? |
| headman | ? | náčelník, vedoucí | náčelnice |

The Czech equivalents are shown in the chart presented; those with a question mark are possible gaps in Czech either because they do not have the term expressing the concept or because they express the concept with a free combination of words. 32 out of 100 studied entries above, 32%, do not distinguish between male and female gender in a single lexical form in English. By contrast, we have examples like *airman /airwoman-vojenský letec/vojenská pilotka, letkyně, chairman/chairwoman - předseda/předsedkyně*, where both languages distinguish gender. Czech seems to be more flexible and efficient in this case and has female terms for almost all the male counterparts. We intuitively hesitate to use some of them, for example, *komička, hasička, nepřítelkyně, popelářka, sanitačka*, etc., but they were found in the dictionary, whereas the empty spaces in the column for Czech female terms suggest a term with no entry in the dictionary at all. 10 male terms in English are translated as a free combination of words in Czech and consequently we consider these to be gaps. The same accounts for their female counterparts.

The number of gaps in English is quite high and we consider 32 items with no gender differentiation to be the result of various circumstances. We refer back to Fischer (1998) who suggests psychological and perceptual salience to be among the most frequent reasons for not having a lexicalized term for a concept in English. This basically means that the less likely we are to encounter the concept in our life the more probable is that it will not be lexicalized. This is a simplified, but plausible explanation. The roles of woman and man in the society have to be

considered and the need for lexical items referring to female agents from Table 11 has to be considered in order to acknowledge the fact that English has no need for such terms or that English uses the male terms not only with reference to males, but also as general terms for referring to women if needed. If the latter is the right answer then there are no gaps in the English part of the series in Table 11 but rather gaps filled by autotaxonomy. However, the Czech free combinations of words used as TE in Table 11 are gaps with few objections. We doubt that there is a need for *dalesman* in Czech vocabulary today, but we take the changing situation into account and similarly as *polař*, *polařka* we assume that the need for translation of concepts not typical for Czech language environment brings into Czech vocabulary lexical items that are unusual and culturally marked, thus we include such terms among the gaps. The data in Table 11

4.3. Filling the lexical blanks in Czech: neologisms

We continue in our study with a quantitative evaluation of lexical blanks in Czech by showing in a small sample the means Czech uses to deal with lexical blanks. We examine *Slovník neologizmů v češtině* by Martincová et al. (2004) and point out to the most affected areas of the Czech lexicon. We concentrate on terms of English origin in the dictionary in order to illustrate the relationship between these two languages. We also analyze the most frequent ways of supplying a new term into the Czech vocabulary and the material used for producing a new word.

Table 12: Neologisms in the Czech vocabulary

| English in Czech | Czech/Eng. spelling | Czech derivations | Czech inflection | Domain |
|---|--------------------------------|------------------------------|-----------------------------|---------------|
| Mac (237) počítač Apple | y/y | 4 | y | Computers |
| mail (238) elektronická pošta | n/y | 4 | y | Computers |
| mailbox (238) elektr.pošt.schránka | n/y | 0 | y | Computers |
| mailer (238) program na el.poštu | n/y | 0 | y | Computers |
| majors (238) velké společnosti | n/y | 0 | n | Film/Music |
| management (240)* | n/y | 0 | y | Business |
| manažer (240) | y/n | 6 | y | Business |
| maniak (241) | y/n | 0 | n | Sociology |
| march (242)* druh kroku | n/y | 1 | y | Sports |
| marineland(242)* mořská zoo | n/y | 0 | y | Biology |
| marketér(242) * pracovník marketingu | y/n | 3 | y | Business |
| market leader (242) přední podnik | n/y | 0 | y | Business |
| mastering (243) závěrečná úprava filmu | n/y | 2 | y | Film/Music |
| m-banking (244)* | n/y | 2 | y | Banking |
| m-byznys (244) | y/n | 1 | y | Business |
| Mcjob (245)* špatně placené místo | n/y | 0 | y | Media |
| McWorld (245)* konzumní svět | n/y | 0 | y | Media |

| | | | | |
|---|-----|---|-------|--------------------|
| MD (245)* minidisk | n/y | 1 | y | Electronics |
| mediatrénink (248) | y/n | 0 | y | Human Resources |
| mentee (253) žák mentora | n/y | 0 | n | Human Resources |
| mentor (253) | n/y | 2 | y | Human Resources |
| mentoring (253) | n/y | 1 | y | Human Resources |
| merchandise (254)*pracovník prodeje | n/y | 0 | y | Business |
| merchandising (254)*prodej | n/y | 1 | y | Business |
| message (254) | n/y | 0 | n | Communications |
| messenger (255) | n/y | 1 | y | Communications |
| miditower (256)* | y/n | 0 | y | Computers |
| minidiscman (260)* | y/n | 0 | y | Electronics |
| m-kommerce (264) | n/y | 0 | y | Business |
| MMS(264) | n/y | 1 | n | Communications |
| mobbing (266) šikana na pracovišti | n/y | 3 | y | Sociology |
| mountainbike (272)* | y/n | 1 | y / n | Sports |
| mountainbiking (272)* | y/n | 1 | y | Sports |
| Mountainboard (272)*snowboard s kolečky | y/n | 0 | y | Sports |
| mountainboarding (272)* | n/y | 1 | y | Sports |
| MP3 (272)* | n/y | 1 | y | Film/Music |
| multibanking (274)* | n/y | 1 | y | Banking |

| | | | | |
|-------------------------------------|-----|---|---|-----------|
| multipack (276) | y/n | 1 | y | Business |
| multiplayer (276)* | n/y | 1 | y | Computers |
| multiplex (276) | n/y | 1 | y | Media |
| myolift (278) vyhlazování vrásek | n/y | 0 | y | Cosmetics |

The dictionary is concerned with Czech neologisms and lists new words covering the period between 1996-2002. The letter *m* that we choose from the dictionary of neologism has 551 entries. It yielded a substantial research sample and we will illustrate the main points by it. We focus on the entries that the dictionary lists as words of English origin. All these entries are listed in Table 12. We provide an explanation where the meaning of the original term can be unclear. The table gives information on the page the term is found in the dictionary of neologism, asterisk indicates the terms that have more than one possible pronunciation, the second column shows possible spelling, i.e. whether they are spelled according to Czech or English orthography. Next the number of derivations is given, i.e. all the words derived from the same root. Further, the table shows whether the term is inflected according to Czech grammatical rules and last the domain where the term is used is given.

We present the data following data, because we would like to draw the attention to the fact that the amount of English words assimilated into the Czech vocabulary is considerable. The English terms are also adopting Czech inflectional and phonological properties and thus creating possible fields which may be later undetectable as borrowings and consequently considered as structures for the study of gaps.

There are 551 entries starting with the letter *m* in the dictionary, there are 80 terms marked as words of English origin among them, (14.5% of all entries). This number rises considerably if we consider all the words that are obviously of English origin, but they have already

assimilated into Czech vocabulary and therefore are not listed as English loans. Example: *megahit*, derivations from the root *media*, *minidisk*, *mininotebook*, *musher*, etc. We should also include literal translations of English terms that are numerous, the calques, *měkký úvěr*, *matka (mateřská společnost)*, *medvěd(spekulant na burze)*, *minipočítač*, etc. Without any doubt, we can say that English is a major source for new words in Czech. This also proves that English is far more generous donor than any other language and that Czech is probably very tolerant to borrowings from English.

We see a trend in the pronunciation of these loans from English and that is to preserve the original pronunciation. The transcription of individual words given by Martincová shows that Czech speakers tend to use the original pronunciation as much as possible or at least to accommodate the pronunciation to Czech phonetic means. Confer: *musher* [mašer], *multipack* [multypek], *mountainbike* [mauntynbajk], *monstrshow* [-šou], *moonizmus* [múnyzmus], messenger [mesindžr], *merchandiser* [mérčendajzr], etc. The examples above can also illustrate the fact how Czech uses English spelling. Most of the words in the left column have their original spelling, sometimes alongside Czech spelling. However, the terms derived from the root terms follow Czech morphological patterns and consequently Czech spelling, confer: *mail* - *mailista*, *mailnout*, *mailovač*, *mailový*; *manažer* – *manažerka*, *manažerský*, *manažerování*, *manažovat*; *mac* - *macař*, *macařský*, *macista*, *macovský*. An interesting note is that some of the borrowed English terms that are written separately in English original are written together in Czech, confer: (eng) *mountain bike* – (cz) *mountainbike*, *mountain board* - *mountainboard*, *mini computer* - *minicomputer*, etc.

The original spelling is not a constraint on the words to adopt Czech inflectional patterns. Only 7 out of the 41 terms in the left column do not inflect according to Czech grammatical rules. This means that they do not differentiate grammatical cases for nouns, etc. The ability to inflect according to Czech grammatical rules and to sustain the pronunciation are two features common to most of the studied words.

Very productive ways of forming new words in Czech are affixation and compounding using various prefixes or combining forms expressing size, magnitude or greatness. The most frequent prefixes are: *macro* 9/ *malo* 6/ *mega* 33 / *meta* 5/ *mikro* 33/ *mini* 45/ *multi* 49 / mnoho 10. There are all together 190 words formed by this type of derivative process. A most productive suffix is Czech – *ový* and English *-ing*, followed by catenative series *-ism* and *-ismus*. Confer: *mozkový*, *multiproduktový*, *multizdrojový*, *macovský*, *banking*, *manažing*, *mentoring*, *mečiarismus*, *macdonaldismus*, *mantinelismus*.

We also encounter a kind of eponymy among the word forming processes: *manhattanizace* – přeměna něčeho v duchu stylu čtvrti Manhattan, *mečiarizmus*, *macdonaldizace*, etc. The this type is one of the marginal word formation processes for creating new terms in Czech, but one that can be on the rise, because of the contact with English. The same accounts for noun to verb conversion. We said before in this study that this process of direct conversion of nouns into verbs makes English more flexible than Czech (see Table 6: The grid of garden tools). Of course that Czech can convert nouns into verbs, but the process is not that usual as in English and the results of conversion seem awkward on some occasions and are rather results of affixation than conversion, confer: *myšnout*, *manažovat*, *muzikálovat*, *mikrovlnit*, etc. The readiness of English for conversion can be probably explained by the nature of the languages, i.e. English is analytic whereas Czech is synthetic. Thus English usually converts word classes without any formal difficulties: *shovel* > *to shovel* whereas Czech needs to use derivation with affixation. Nevertheless, we find instances in Czech and English where both languages use the same derivative process in order to form a new word, confer: (Martincová:138) *globální* > *globalizovat*, *global* > *globalize*.

We leave this morphological comparison to future studies and say that the above result is reflected in the material we find in *Slovník neologizmů v češtině*. Further we focus on the word classes among the neologisms. There are few verbs listed among the terms, in fact there are only 6 verbs listed as to be of English origin: *mailnout*, *manažerovat*, *manažovat*, *masterovat*,

mentorovat, mobbovat and 6 other verbs: *maskulinizovat se, medializovat, míčkovat, mikrovlnit, mikroplatit, muzikálovat, myšnout*. Similarly, there are only 6 adverbs among the entries under the letter M: *multijazykově, mikroplatebně, mezikulturálně, mezikulturně, mezifiremne, mečiarovsky*.

Most of the new terms are nouns and adjectives, the left column in Table 12 shows only nouns and the derivations resulting from these root bases are mostly adjectives. Some of the new terms are abbreviations, confer: *MD, MMS, MP3* and these are terms brought along with the development of modern technologies. Similarly, *m-buzynes, m-banking, m-komerce*, are terms formed by combining abbreviation and a base word naming processes related to modern ways of communications, (*m- mobilní*).

Finally, we mention the domains which are affected by the new words or which need the new terms in order to fill the lexical blanks. The findings show that most of the terms come into very specific areas of vocabulary. These are: business 19, computers 15, sports 9, human resources 7, sociology 6, film/music 6, communications 5, banking 5, electronics 3, media 3, cosmetics 1, biology 1. The analyzed words show that modern areas like business, computers, electronics are the areas with the biggest need for new terms, but also the areas where terms of English origin are filling the gaps in Czech vocabulary. Czech speakers seem to prefer borrowing new terms in modern areas of human activities in general and Czech is mostly used as a material for coining new terms to express concepts in human relationships (*mámatáta*) or to express more subtle nuances of meaning, i.e. diminutives etc., confer: *mejlik, mobilek, myšítko, mluvča* (*hanl. tisková mluvčí*).

4.4. Summary and discussion of findings

In order to analyze the phenomenon called a lexical gap, we suggested several possible approaches in the theoretical part of this paper. We followed the methods of Lehrer (1974), Fischer (1998) and Bentivogli and Pianta (2000) and considered several lexical fields and dictionary entries to locate possible gaps. We discussed the gaps proposed by our research and summarized the findings in charts and tables. We also suggested the working term ‘lexical blank’ referring to vacancies filled by neologisms in Czech. Consequently, we considered neologisms in *Slovník neologismů v češtině* and concentrated on neologisms of English origin. Our findings are only illustrative, because some parts of our research were hypothetical and inconclusive. The findings can be divided into following subcategories:

a. The effectiveness of the methods used in the search for gaps

Most of the gaps suggested by the first part of our study concerned the lexical fields of verbs *jump* and *throw* in principle proved the possibility of finding ‘prototypical’ lexical gaps according to Lehrer’s and Fischer’s hypothesis. By introducing new parameters we aimed at finding matrix gaps (Lehrer) and gaps in proportional series (Fischer). We found several gaps, but concluded that all these gaps are names for rather redundant activities or situations. The analysis of proportional series in example c, d, e returned more feasible results due to the fact that we compared English and Czech in this part of our study. The results revealed gaps among the terms of animal species, human relationships and garden tools. We combined the methods in this part of our study, i.e. we searched lexical fields and compared English and Czech.

The second part of our research followed Bentivogli and Pianta’s method. We searched bilingual dictionary in order to locate the Czech TEs which consisted of free combinations of words. The search among randomly chosen entries found that approximately 4 % of SL terms did

not have a single word TE in Czech. We searched also for TEs of man/woman corresponding lexical items and found that 32 out of 100 entries referring to male roles did not have a lexicalization for corresponding woman counterpart in English. The comparison of English with Czech revealed 9 missing TEs among the male terms and 16 missing TEs among the female terms.

Lastly, the analysis of neologisms in *Slovník neologismů v češtině* showed the areas of the Czech vocabulary affected by borrowing from English to be mostly related to modern developments in the society, i.e. technology, IT, banking, media, etc. It also illustrated the phenomenon of ‘lexical blank’ which we proposed as a working term in our paper. This method was used on the basis of the assumption that borrowings between languages are ways of filling lexical vacancies in languages and these vacancies may be theoretically linked with lexical gaps.

b. The characteristics of analyzed gaps

The research brought us to the assumption that a lexical gap is a scalar phenomenon. The boundaries between individual kinds of gaps are not clear, for some types of gaps can be interrelated with other kinds, yet others may be more obvious and plausible, these we called prototypical gaps. The occurrence of prototypical gaps is exclusively discussed in relation to lexical structures in our paper. The less obvious or even hypothetical gaps related to our research by the possibility that the lexical fields in which they occur are mutually overlapping with other lexical fields were called lexical blanks. Lexical blanks can be also seen as language structures that are broadening the lexicon of a language and thus giving basis for developing new means and semantic concepts which may be later important for locating possible lexical gaps. We also considered the term ‘functional gap’ and concluded that it is rather fluid phenomenon which applies to various concepts. It seems that the phenomenon of lexical gap is unsupported from various viewpoints, but mainly because of the earlier mentioned fluidity of meaning in general. The gaps suggested by this paper may be relevant in some cultural environments in a certain point in the history, but they may

be found irrelevant in the course of language changes. Also the lexical fields suggested may be broader than assumed and the items in the fields may contain components which we can not perceive with our current knowledge.

c. The importance of lexical gaps

It is natural for language speakers to come in the contact with concepts which are not lexicalized in their language. The means of filling such vacancies are various, as we suggested in the study, but it is important to note that the number of vacancies which can be labeled as prototypical gaps is very low. The first part of our research suggested several gaps for different concepts which were marginal to the core of their lexical fields. In our second part of research we localized only 4.5 % of English terms which we called gaps. Speakers have means to fill lexical gaps with other lexical items from similar fields or other languages. It seems that the moment speakers realize the fact that there is a lexical vacancy in their vocabulary for an important concept they tend to fill such vacancy with available means. Thus the search for lexical gaps is at the same time a procedure starting the process of filling the gaps it founds.

6. Conclusion

The research of a language lexicon is not only interesting and informative, but also challenging and unsettling. Researchers may use the most modern methods and tools in order to find out that their results are outdated and inconclusive by the time their research has been finished, because of the fact pointed out by Lyons (1977: 252): ‘The vocabulary of a language as an integrated system of lexemes interrelated in sense. The system is in constant flux. Not only do we find previously existing lexemes disappearing and new lexemes coming into being throughout the history of a language; the relations of sense which hold between a given lexeme and neighbouring lexemes in the system are continually changing through time. Any broadening in the sense of one lexeme involves a corresponding narrowing in the sense of one or more of its neighbours.’ The current search for lexical gaps in our study may be affected by this claim, because the most difficult part in this paper was not to find a possible lexical gap, but to justify its credibility from different viewpoints. We had to work with dictionaries that may have been outdated or cultural knowledge that is unsupported in the current society, we used WordNet application version 1.7.1. on the CD-ROM only to reveal that there are upgraded versions of this application by the time we have had finished. The discussion of gaps is primarily a discussion of the meaning of words. In order to propose a gap we had to study the meanings of individual lexical units, the difficulties encountered in the course of the study were all related to meaning and its lexical realization. We needed the knowledge of lexical semantics and the phenomenon of lexical field in our study. We worked with several thesis and approaches, mainly that of Lehrer and her structural approach of finding lexical gaps in a language independently and with the study of Bentivogli and Pianta that shows the quantitative comparison of two languages in order to find out the lexical differences in their vocabulary. We also referred to *Slovník neologizmů v češtině* by Martincová to analyze the treatment of lexical blanks in the Czech vocabulary.

The cross-cultural contact and consequent contact of languages is inevitable in the modern world, the question whether the influence of one language on another language can have problematic consequences for the culture and users of the affected languages is complex. We proposed the working term 'lexical blank' as a term covering the concept of a structure covered by a lexical borrowing from other languages, because we think it is phenomenon related to lexical gaps. The present study suggested that Czech lexicon is influenced by foreign loans and that English words significantly change the structure of Czech vocabulary. Some areas of Czech vocabulary are affected more than others, but the danger lies in the fact that English words considerably influence some domains in Czech. English also motivates some unusual grammatical and consequently semantic forms in Czech where Czech speakers use English bases or their translation for deriving new words in Czech, cf. *m-banking, mountainbike, macdonaldizace*. The assimilation of foreign terms into the Czech vocabulary may pose future problems for the speakers. The biggest difficulty facing a language user is to understand all the new forms appearing in texts nowadays. For example, the problem of understanding texts among young pupils and students draws the attention of media in the Czech Republic today, but the fact that texts can contain a high percentage of foreign words, especially English, and thus be difficult to comprehend is sometimes ignored. We showed in our analysis that English fills the vacancies in Czech dictionary quite often and that there are domains where the frequency of English terms is considerable. We also showed that Czech accommodates unusual word formation processes similar to English word formation processes (conversion), the outcomes of such formations can be semantically opaque and consequently odd, cf. *manažer > manažovat, myš > myšnout*. To claim that Czech morphology is influenced together with the lexicon by outside influences to the extent that the understandability of the language is endangered is very bold and it would need more extensive research. With regard to our results, we can say that there are lexical gaps in both languages, Czech and English. We questioned the relevance of such gaps from different views and all the located lexical gaps were noted in this paper.

5. Shrnutí

1. Úvod

Při stýkání dvou rozličných jazykových kultur dochází k potřebě transferu mezi jednotlivými jazyky použitými v průběhu komunikace. Všeobecně se předpokládá, že každý jazyk má určitou formu pojmenování pro každou myšlenku nacházející se v prostředí dané kultury. Zároveň se očekává, že jednotlivé jazyky budou mít odpovídající jazykové prostředky potřebné pro transfer sdělení mezi sebou navzájem. Existují studie, které se zabývají přenosem významů mezi jednotlivými jazyky a jejich formou. Tyto studie poukazují na možnost chybějících lexikálních prostředků v jednotlivých jazycích pro vyjádření určitých myšlenek nebo jevů. Tyto studie rovněž poukazují na možnost chybějících lexikálních prostředků, pro komunikaci mezi jednotlivými jazyky, tj. chybějící lexikální prostředek stejné kvality pro překlad výrazu z druhého jazyka. Tento jev se nazývá lexikální mezera "lexical gap" a tato práce se pokusí prozkoumat jednotlivé metody identifikace lexikálních mezer, charakterizovat druhy lexikálních mezer a popsat oblasti jazyka s nejčastějším výskytem tohoto jevu. Tato studie pracuje s angličtinou a češtinou a pokusí se na jejich vzájemné srovnání vyhodnotit lexikální mezery ve slovní zásobě těchto jazyků.

2. Teoretická východiska

2.1 Sémantika

Zkoumání základních pojmů a přístupů k problematice významu slov je nutné začít studiem významu jako pojmu samotného. Touto problematikou se zabývá sémantika a s ní spojené vědy. Pro účely naší studie bude důležité se seznámit se základy lexikální sémantiky, která se soustředí na význam jazykových prostředků a jevů, ale zároveň význam těmito prostředky a jevy vykládá. Lexikální sémantika je poměrně nová součást jazykovědy a naše studie se opírá hlavně o teoretické

práce Johna Lyonse, Geoffreyho Leech a Alana Cruse a jejich diskuse o významu slovních prostředků.

2.1.1. Význam

Přístupů k výkladu významu existuje v odborném světě několik. Cruse například vyjadřuje pochyby o možnosti přesně popsat význam a jeho hledání významu je hledáním způsobu jak se přiblížit možnému významu dostatečně pro potřeby jeho výzkumu. Lyons poukazuje na fakt, že význam vět a slovních spojení je tvořen významem slov z nichž se skládají. Leech pracuje hned s několika druhy významu z nichž ten, který označuje za "conceptual" je z jeho pohledu klíčový pro studium lexikálního významu. Zároveň dokládá, že celkový význam jazykového vyjádření je složen právě z těchto jednotlivých významů. Stejně tak zdůrazňuje úlohu jazykové kompetence rodilých mluvčích a jejich schopnost rozlišit ngramatické a nesmyslné jazykové projevy. Podle Leech je možné studovat jednotlivé významy jazykových prostředků na základě rozdílů mezi jejich významovými komponenty a to ve všech úrovních jazyka.

2.1.2. Lexikální pole

Podle Aitchisonové jsou slova v našich myslích organizována do důmyslných struktur. Pojem lexikální pole (struktura) bude jedním z klíčových pro naše účely. Lyons říká, že slovní zásoba jazyka je systém složený z jednotlivých lexikálních prostředků propojených navzájem. Lehrerová uvádí, že existují pole konceptuální / myšlenková (conceptual fields) a pole lexikální. Tato lexikální pole se snaží pokrýt pole myšlenková a tam kde se nepřekrývají vznikají lexikální mezery. Lexikální pole jsou různě organizována a mohou mít podobu proporčních sérií (proportional series), hierarchií, taxonomií, lineárních řetězců a nebo jinou.

2.2. Lexikální mezera

2.2.1. Definice lexikálních mezer

Jak jsme naznačili dříve, lexikální mezera je chybějící část v jazykovém systému nebo jazykové struktuře. Některé studie zpochybňují výskyt lexikálních mezer a jiné se snaží lokalizovat lexikální mezery v jednotlivých jazycích na základě chybějících pojmů popisujících koncepty vztahující se k dané jazykové oblasti. Tyto mezery je tedy možno najít při zkoumání významů jednotlivých slov a jejich vztahů v určitém systému. Lehrerová například uvažuje o mezerách na všech úrovních jazyka: fonologické, morfologické, syntaktické i sémantické. Nás budou zajímat tzv. "matrix gaps", které se lokalizují na základě sémantických komponentů jednotlivých slov organizovaných do struktur (matrix). Cruse a Fischer navrhuje mezery v hierarchiích, kde můžeme pozorovat chybějící hyponyma nebo hyperonyma. Př. *hop, walk, run* - nemají v anglickém jazyce bezprostřední hyperonym. Stejně tak Fischer tvrdí, že není generický termín pro dvojici *uncle – aunt*, na stejné rovině jako je *child* pro dvojici *son – daughter*. Hledání těchto mezer je často hypotetická práce postavená na předpokladech. Lehrerová dále hovoří o "functional gap", který si mluvčí uvědomí, když narazí na skutečnost, pro kterou nemá vhodné lexikální pojmenování. Lehrerová pracuje s lexikálním polem slova *cook* a uvádí, že v anglickém jazyce v něm chybí termín pro jev *vařit na horkém povrchu bez oleje nebo vody*.

Další způsob lokalizace lexikálních mezer je komparatistická studie lexikálních mezer Bentivogliové a Piantové, které hledají lexikální mezery tak, že porovnávají slovní zásobu dvou jazyků podle předem stanovených kritérií. Podle nich je několik typů rozdílů mezi jednotlivými jazyky, z kterých ten pro nás nejdůležitější je, když cílový jazyk nemá vhodný lexikální ekvivalent pro slovo ze zdrojového jazyka a nebo když cílový jazyk překládá slovo ze zdrojového jazyka volnou kombinací slov. V těchto případech se jedná o lexikální mezeru. Při použití této metody je třeba určit co je pevné a co volné spojení slov, abychom mohli správně identifikovat chybějící překladové ekvivalenty. Hranice mezi pevným a volným slovním spojením je však někdy nejasná a tak určit o jaké spojení jde je jedním z nejnáročnějších úkolů v naší studii.

Fischer zmiňuje tři hlavní příčiny: psychologickou důležitost, percepční důležitost a "prototypicality". Lexikální mezery podle těchto kritérií vznikají, když jev (koncept) není důležitý v daném jazykovém prostředí, když je jev (concept) z percepčního hlediska těžko postřehnutelný a nakonec pokud daný jev (koncept) nemá v dané jazykové oblasti jasně vyhraněný prototyp (prototype).

2.2.2. Co je a co není možno prohlásit za lexikální mezeru

Lehrerová uvádí několi omezení, která vylučují vznik lexikálních mezer, tj. Nemůžeme pokaždé, když nenajdeme vhodné slovo tvrdit, že jde o lexikální mezeru. Tato omezení určují, že mezery nevznikají pro nemožné jevy (impossible concepts, situace nebo předměty. Lexikální mezera v systému (matrix) je stanovena jen na základě významových komponentů důležitých pro celý ateri a obsažených v centrálních slovech systému.

2.3. Přístupy k lexikálním mezerám

Pro účely naší práce jsme přístupy používané k lokalizaci lexikálních mezer rozdělili na dvě skupiny. V jedné skupině jsou metody, které se pokouší lokalizovat lexikální mezery v jednom jazyce při ateria jazykového systému a jeho lexikálních struktur a ve druhé skupině jsou metody, které srovnávají dva jazyky a identifikují lexikální mezery na základě chybějících termínů v jednom jazyce pro překlad slov z druhého jazyka.

2.3.1. Strukturální přístupy (v jednom jazyce)

Všechny výše zmiňované práce spadající do této skupiny, Lehrerová, Cruse, Fischer, analyzují různá lexikální pole a významové komponenty slov v nich obsažených. Tyto studie používají srovnání dvou jazyků jen pro ilustraci analyzovaných jevů. Lehrerová poukazuje na chybějící výraz pro samce v sérii: *pes – fena / ?* při srovnání se sérii: *horse – mare/stallion*. Lehrerová tvrdí, že

neexistuje termín označující samce od psa, který zároveň není používán jako generický termín v této sérii. Dále Lehrerová pracuje s významovými komponenty /parametry slov v lexikálním poli slova *cook*. Vybírá několik slov z tohoto pole: *boil, steam, fry, bake, roast, broil*. Na základě slov obsažených v tomto lexikálním poli stanovuje několik parametrů (např. *Vařit ve vodě/ na oleji/ v troubě / otevřeném ohni / atd.* Podle těchto parametrů, které umístí do tabulky (*ateri*) hledá místa v této tabulce, kde průsečík os jednotlivých parametrů neobsahuje žádný termín/slovo pro popis jevu, který tato kombinace parametrů navrhuje. Některé následně navržené lexikální mezery navrhuje pro jejich neopodstatněnost, ale zároveň navrhuje lexikální mezeru pro: *cook gently in a small amount of fat in the oven for a long time*. Výsledek její analýzy a opodstatněnost nalezené lexikální mezery může být zpochybněna podrobnější studií, ale pro ilustraci její metody je dostačující.

2.3.2. Srovnávací přístupy (ve dvou jazycích)

Metoda Bentivogliové a Piantové je založena na srovnání dvou jazyků a jejich slovní zásoby. Při hledání lexikálních mezer se vylučovací metodou propracovávají až do *ate*, kde cílový jazyk nemá vhodný protějšek pro slovo ze zdrojového jazyka a nebo vyjadřuje toto slovo pomocí volného víceslovného spojení. Nalezená volná slovní spojení je nutno *ate* kvalifikovat a hodnotit, abychom mohli potvrdit nález lexikálních mezer. Jejich práce je kvantitativní a bohužel neuvádí nalezené lexikální mezery mezi italštinou a angličtinou. Jejich výsledkem je procentuální vyhodnocení rozdílnosti slovních zásob obou jazyků a to, že našli v italštině 4, 738 lexikálních mezer v 60,901 zkoumaných významů slov, 7.8% ze všech testovaných slov.

2.4. Vypořádávání se s lexikálními mezerami

Mluvčí jazyka mohou lexikální mezery zaplňovat několika způsoby. Podle Cruse se často pro chybějící termín v hierarchii použije termín bezprostředně nadřazený, tzv. Autotaxonomie nebo pro chybějící pojmenování části celku se použije termín pro celek, tzv. Automeronime. Lehrerová a Newmark se zabývají výpůjčkami a tvorbou nových slov, která uvádějí jako řešení pro zaplnění lexikálních mezer. Nekula ate tyto výpůjčky z angličtiny do češtiny třídí podle oblastí slovní zásoby a jejich slovotvorby. Martincová vypracovává slovník neologizmů v češtině, který tyto novotvary z jednotlivých oblastí češtiny vyhledává a lexikalizuje.

3. Záměr, metoda a data

V první části této práce se pokusíme na základě metod Lehrerové identifikovat lexikální mezery v anglickém jazyce v různých lexikálních polích. Ve druhé části se práce pokusí srovnat slovní zásobu českého a anglického jazyka s účelem lokalizovat chybějící slova v jednom z jazyků odpovídající významem slovům v jazyce druhém. V poslední části se za pomoci slovníku neologizmů pokusíme charakterizovat, jakým způsobem se v českém jazyce lexikální mezery nejčastěji zaplňují a jaké oblasti češtiny mají největší potřebu pro nové termíny. Cílem práce je zjistit zda pomocí výše zmiňovaných metod lze lexikální mezery v jazyce identifikovat. Pro srovnání a výběr dat jsme použili slovník Lingea Lexicon 5, česko – anglický, anglicko – český, (LL5), anglický slovník Cambridge Advanced Learner's Dictionary (CALD). Slovníky jsou zaměřeny na všeobecnou část slovní zásoby a proto výhradně odborné výrazy nebyli dostatečně zkoumány. Protože si myslíme, že otázka neologismů a jejich studie souvisí s problematikou lexikálních mezer, použili jsme neologismy jako studijní materiál a koncepty lokalizované jejich pomocí jsme označili pracovním názvem "lexical blank".

4. Výzkum

4.1. Možné lexikální mezery v lexikálních polích

Příklad a: *to jump*

Zkoumání lexikálního pole slovesa *to jump* a následná analýza navržených komponentů navrhla lexikální mezeru pro koncept: skákat za použití nějakého nástroje a přitom vyjadřovat emoce. Další analýza navrhla lexikální mezeru pro koncept: skákat směrem dolů a vrátit se na stejné místo v případě živého konatele. Jak je vidět oba koncepty jsou velmi hypotetické a mohou být na základě dalšího zkoumání zavrženy jako neopodstatněné. Viz. Table 1 a Table 2

Příklad b: *to throw*

Zkoumání lexikálního pole slovesa *to throw* lokalizovalo možnou lexikální mezeru pro koncept: házet opakovaně a bez míření. Viz. Table 3. Parametry pro analýzu jsme určovali zkoumáním slov v tomto lexikálním poli. Ať mezera navržená v 1b, tak mezery navržené v 1a jsou podle kritérií navržených Lehrerovou možné, ale z hlediska upotřebení lze posuzovat tyto koncepty jako okrajové a tím tyto mezery zpochybnit.

Příklad c: zvířecí druhy

Tento druh lexikálního pole je nazýván proporční série u Fischera, Cruse hovoří o síti a Lehrerová stejné pole používá při analýze svých "matrix gaps". Tyto série mohou být doplněny o všechny možné druhy zvířat a tím znásobit možný výskyt lexikálních mezer. I v tomto příkladu jsme analyzovali jen jazyk anglický stejně jako v 1a a 1b. Lexikální mezery z této analýzy se týkaly chybějících pojmenování pro místo rozmnožování a aktu rozmnožování. V případě slova *pig* máme slovo pro rozmnožování *farrow*, následně postrádáme stejně specifické termíny pro ostatní zvířecí druhy. Tento druh lexikálních mezer je většinou řešen autotaxonomií.

Příklad d: rodinné vztahy

Zde jsme identifikovali mezery pro slova označující koncept "chovat se jako": *motherlike/fatherlike/uncle?*, dále paralelní termíny pro *mother - to mother, father - to father, uncle - ?, atd.*

Zde jsem také poprvé porovnávali oba jazyky a zjistili, že čeština nedisponuje odpovídajícími jednoslovnými ekvivalenty pro slovesa *to mother*, *to father* a dalšími paralelními slovesy pro jednotlivé členy rodiny. Stejně tak čeština nemá jednoslovné překlady pro *motherlike*, *fatherlike*, *sisterlike*, *brotherlike*.

Příklad e: zahradnické nástroje

Tento příklad byl zajímavý hlavně při srovnání obou jazyků. Čeština musí použít opisy pro anglické *to shovel*, *to pickaxe*, *to pitchfork*, *to wheelbarrow* a další. Zaznamenali jsem, že anglická slovesa konvertovaná ze substantiv jsou v češtině většinou nahrazena víceslovnými ekvivalenty.

4.2. Srovnávací hledání ve slovnících

Příklad f: písmeno k

V této části studie jsme použili Lingea Lexicon 5 a zkoumali kolik hesel začínajících písmenem *k* v anglickém jazyce nemá jednoslovný ekvivalent v jazyce českém. Analýza ukázala, že je možné identifikovat 9 lexikálních mezer. Většina z nich jsou opět chybějící jednoslovné ekvivalenty pro anglická slovesa konvertovaná ze substantiv z různých oblastí jazyka.

Příklad g: ki – hledání

Tato analýza odhalila 7 možných lexikálních mezer a z toho 4 byla opět slovesa. Vzorek slovní zásoby byl vybírán náhodně a výsledky získané měly ilustrovat množství lexikálních mezer ve všeobecné slovní zásobě. Analýza v tomto případě lokalizovala lexikální mezery v různých oblastech jazyka.

Příklad h: písmeno l

V tomto případě výsledek analýzy označil 9 možných lexikálních mezer v českém jazyce a z toho 6 sloves. Slova byla z různých oblastí jazyka, nejvíce z technických oborů.

Příklad i: -man hledání

V této části jsme se zaměřili na slova s generickým kořenem *man* v angličtině a hledali jsme v češtině jejich překlady, které by mohli být označeny jako víceslovná volná spojení a následně prohlášeny za lexikální mezery. Záměrně jsme vybrali tento slovní kořen, protože jsme očekávali zvýšený výskyt víceslovných českých ekvivalentů. To se ukázalo jako pravdivé, ale výsledná slovní spojení bylo těžké prohlásit za spojení volná a nebo pevná. Naše hledání bylo ovlivněno zadáním vyhledávacích argumentů a tak jsme následně obdrželi 16 možných výrazů, které jsme mohli označit jako lexikální mezery.

Příklad j: man vs. woman

Tento příklad nám objevil 32 možných hesel v anglickém jazyce, která nemají slovní výraz pro ženské role ve stejné funkci. Následné srovnání s češtinou ukázalo, že i v českém jazyce nejsou pro některá anglická slova vhodné ekvivalenty a to jak pro označení mužských tak i ženských rolí. Následná analýza výsledků ovšem zpochybnila použitelnost navržených termínů, které by zaplnily lexikální mezery odhalené naší studií.

4.3. Vyplňování "lexical blanks" v češtině: neologizmy anglického původu

Table 12 obsahuje všechny anglicismy nalezené ve slovníku. Navíc jsme poukázali, že i velké množství dalších hesel začínajících na písmeno *M*, která jsme analyzovali je možno považovat za slova angličtinou ovlivněná. Zde se ukázalo, že čeština používá nová slova z angličtiny hlavně v oborech zabývajících se moderními technologiemi, dále v obchodní sféře, sportu, atd. Čeština si osvojuje přejatá slova z angličtiny a přizpůsobuje je svému flektivnímu systému. Zároveň se snaží zachovat anglickou výslovnost a pravopis pokud je to možné. Některé slovo tvorné procesy použité při tvorbě neologizmů jsou pro češtinu neobvyklé a je možné pozorovat, že čeština je i v tomto směru angličtinou značně ovlivněna.

4.4. Shrnutí výsledků

Abychom mohli analyzovat lexikální mezery, zkoumali jsme různé metody. Použili jsme metody Fišerové(1974), Fischer(1998) a Bentivoglioové a Piantové(2000). Tyto přístupy se lišily v přístupu a kritériích na lexikální mezery. Zavedli jsme také pracovní název "lexical blank", který jsme použili pro označení struktur nalezených za pomoci analýzy neologismů.

a. Efektivita použitých metod

Tzv. prototypické mezery jsme našli pomocí Lehrerové metody a její analýzy komponentů v lexikálních polích. Metoda Bentivoglioové a Piantové nám odhalila, že jen 4% ze studovaných hesel neměla lexikální ekvivalent v češtině.

b. Charakteristika nalezených mezer

Použité metody nám odhalily několik prototypických mezer, ale také několik mezer funkčních, které jsme považovali za přechodové mezy různými druhy mezer a zahrnuli jejich výskyty mezi prototypické mezery. Nejsložitější bylo obhájit relevanci lokalizovaných konceptů, které neměly lexikalizované ekvivalenty z pohledu jejich významu v příslušné jazykové komunitě.

c. Význam lexikálních mezer

Z kvantitativního pohledu jsme zjistili velmi malé množství mezer. Pouze některé jejich výskyty bylo obtížné zaplnit jazykovými prostředky. "Lexical blanks" ukázaly na oblasti češtiny nejvíce postižené tímto jevem. Mezery se zdá nezpůsobují vážné komunikační nedostatky a mluvčí je dokáže zaplnit podle potřeby.

5. Závěr

Tato studie potvrdila, že je možné nalézt lexikální mezery v jazyce nezávisle na druhém a rovněž lze nalézt lexikální mezery porovnáním slovních zásob rozdílných jazyků. Naše práce se zaměřila na anglický a český jazyk a lokalizovala několik lexikálních mezer oběma zmiňovanými způsoby. Nejsložitější při hledání lexikálních mezer v lexikálních polích anglického jazyka bylo následně tyto mezery ospravedlnit z funkčního pohledu. Srovnání slovní zásoby obou jazyků lokalizovalo několik mezer z různých oblastí slovní zásoby a ukázalo rozdílný charakter jazykových zvyklostí a kulturních předpokladů obou zemí. V poslední části této studie se při analýze neologizmů v češtině poukázalo na oblasti, ve kterých jsou nejvíce uplatňovány nové termíny a zároveň se zjistilo, že anglický jazyk hraje značnou roli při tvoření nových slov v češtině, ať už poskytováním výpůjček a nebo ovlivňováním tvoření nových slov v češtině podle slovotvorných procesů typických pro anglický jazyk.

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